

19971217.qrp v00_n942.qrs.971217

Date: Wed, 17 Dec 1997 19:03:06 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 942

QRP-L Digest 942

Topics covered in this issue include:

- 1) [32932] Re: carbon fiber rods
by Paul Helbert <phelbert@rica.net>
- 2) [32933] [Fwd: N7IR ARRL 10 Meter SO/Mixed/QRP]
by Gary Hembree <Gary.Hembree@ASU.edu>
- 3) [32934] HW-8 final - thanks
by WB7WHI <WB7WHI@aol.com>
- 4) [32935] Re: New Novice/Tech+ Sprint
by bertieh@dancris.com
- 5) [32936] Re: 1955 Handbook
by "Dean T. Miller" <dtmiller@dsmsnet.com>
- 6) [32937] Trade?
by Paul Curtis <pccurtis@flash.net>
- 7) [32938] Autotuner
by "Junius B. Fox" <w5hir@mail.phoenix.net>
- 8) [32939] OHR Rigs FS
by "Jim Johnson" <km7h@gte.net>
- 9) [32940] Pixie II
by "Junius B. Fox" <w5hir@mail.phoenix.net>
- 10) [32941] Re: New Novice/Tech+ Sprint
by Joe Gervais <vole@primenet.com>
- 11) [32942] Re: Software
by "HB Electronics (Bob Berlyn)" <hb_elec@ids.net>
- 12) [32943] Help: TiCK-1 with SW-40
by Yong Ku Cho <sungch@nwlinc.com>
- 13) [32944] Re: 1955 Handbook
by n3fel@juno.com (Howard D Rubin)
- 14) [32945] Re: Software
by n3fel@juno.com (Howard D Rubin)
- 15) [32946] Want to buy QRP Rig....
by ke4ke@juno.com
- 16) [32947] Re: Output levels - volts peak to peak and dbm
by KV1V <KV1V@aol.com>
- 17) [32948] [2N2222] Happy Bday Mr. Transistor
by ron baldwin <rons@scruznet.com>
- 18) [32949] Tube diagrams
by "Frank Grigaliunas" <fgrig@iea.com>
- 19) [32950] Re: [2N2222] Happy Bday Mr. Transistor

- by Paul Harden <pharden@aoc.nrao.edu>
- 20) [32951] New 6-meter QRP Rig
by AF5U <AF5U@aol.com>
- 21) [32952] Re: [2N2222] Happy Bday Mr. Transistor
by Greg Newberry <newberry@cyberhighway.net>
- 22) [32953] Gap Titan, basics, guys, 80M
by "rohre" <rohre@arlut.utexas.edu>
- 23) [32954] Do you know these QRPers?
by Bill Todd <bill@techline.com>
- 24) [32955] FYBO: Field Op Seeking Partners!
by Joe Gervais <vole@primenet.com>
- 25) [32956] Cherokee SSB CB HT
by AF5U <AF5U@aol.com>
- 26) [32957] Re: Help: TiCK-1 with SW-40
by Bensondj@aol.com
- 27) [32958] Argo556 for sale; Argonaut 509 for sale
by K3TE <qrp@earthlink.net>
- 28) [32959] FYBO: Field Op Seeking Partners!
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 29) [32960] Re: Cherokee SSB CB HT
by nq2rp@juno.com (B/BAMS Club Station)
- 30) [32961] Re: 6 Meter QRP
by nq2rp@juno.com (B/BAMS Club Station)
- 31) [32962] RE: Paddle arrives
by "Rattray, Bruce" <Rattray@siast.sk.ca>
- 32) [32963] Re: Software
by WB0NZM <WB0NZM@aol.com>
- 33) [32964] Gap Titan, basics, guys, 80M
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 34) [32965] Do you know these QRPers?
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 35) [32966] Re: [2N2222] Happy Bday Mr. Transistor
by mikemo@ibm.net
- 36) [32967] FS: Kenwood R-2000 rcvr + manuals
by "John P. Spoonhower" <spoon@kodak.com>
- 37) [32968] TKS:Help w/Timewave 599ZX
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 38) [32969] QSL Card Software
by Steve Slavsky <sslavsky@CapAccess.org>
- 39) [32970] Iambic A or B
by MJMULLINS@dow.com
- 40) [32971] Re: Pixie II
by John Evans - N0HJ <jaevans@codenet.net>
- 41) [32972] RE: Help: TiCK-1 with SW-40
by Yong Ku Cho <sungch@nwlk.com>
- 42) [32973] Re: Software
by Todd Nichols <nichols@rtp.ericsson.se>
- 43) [32974] Introduction

by Kevin.B.Walker@ait6.ameritech.com

44) [32975] DX on 20 meters
by "Jeff M. Gold" <jgold@tntech.edu>

45) [32976] Re: FS: QRP+ original model
by "STUART B.D.HUNT" <stuart001@ameritech.net>

46) [32977] PCB Artwork Software
by "Dr. Kenneth Cavcey" <cavcey@boulder.nist.gov>

47) [32978] Re: [2N2222] Happy Bday Mr. Transistor
by "Bob Kellogg" <ae4ic@nr.infi.net>

48) [32979] Introduction
by "W. D. (Doc) Lindsey" <70511.3041@compuserve.com>

49) [32980] Re: HW-8 final - thanks
by Ed Loranger <we6w@qsl.net>

50) [32981] Re: [2N2222] Happy Bday Mr. Transistor
by Robert Parks <rob3ert@vegas.infi.net>

51) [32982] kite parts catalog
by mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)

52) [32983] Re: Iambic A or B
by Bob Patten <n4bp@bc.seflin.org>

53) [32984] CK722 Memories
by "Gary R. Hanson" <ghanson@uts.cc.utexas.edu>

54) [32985] Re: Iambic A or B
by Ed Loranger <we6w@qsl.net>

55) [32986] Re: Introduction
by "david's" <elim@ime.net>

56) [32987] Re: Cherokee SSB CB HT
by "Steve Hurst" <shurst@magiclink.com>

57) [32988] 38Special
by ENGINEERING <clinco@bellsouth.net>

58) [32989] Re: Iambic A or B
by Bob Patten <n4bp@bc.seflin.org>

59) [32990] Re: CK722 Memories
by Robert Parks <rob3ert@vegas.infi.net>

60) [32991] QRP output levels
by mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)

61) [32992] Web Site Update
by "Marshall Emm" <mgemm@mtechnologies.com>

62) [32993] Re: [2N2222] Happy Bday Mr. Transistor
by "KA5T Larry Wise" <lewise@inetport.com>

63) [32994] Re: QSL Card Software
by Chris Trask <ctrask@primenet.com>

64) [32995] Re: CK722 Memories
by Vic Rosenthal <rakefet@rakefet.com>

65) [32996] Re: [2N2222] Happy Bday Mr. Transistor
by Jim Eshleman <lujce@hooch.cc.Lehigh.EDU>

66) [32997] Re: 6 Meter or 10-meter HTs
by AF5U <AF5U@aol.com>

67) [32998] TiCK-2B Review

- by "Michael Fletcher" <kl7ixi@mailcity.com>
- 68) [32999] Re: Allen Wrench - NorCal Paddles - Rage
by Bill Howell <bhowell@mail.utexas.edu>
- 69) [33000] Cherokee 10 & 6 meter HTs
by AF5U <AF5U@aol.com>
- 70) [33001] Anti-static wrist straps
by Stephen Gibson <SWGibson@worldnet.att.net>
- 71) [33002] Re: Allen Wrench - NorCal Paddles - Rage
by Greg Weinfurtner <weinfurtner@ouvaxa.cats.ohiou.edu>
- 72) [33003] Test - Do Not Read
by "Dasher, Mark" <DasherM@IRWIN.ARMY.MIL>
- 73) [33004] WTB: TenTec 9MHz Filters
by Gary Hembree <Gary.Hembree@ASU.edu>
- 74) [33005] Microsim PSpice
by "Frank A. West" <ke6vhm@earthlink.net>
- 75) [33006] Re: Allen Wrench - NorCal Paddles - Rage
by Chris Cartwright <ccart@dns.vidtel.com>
- 76) [33007] Re: Allen Wrench - NorCal Paddles - Rage
by Roger Braker <msebrakr@telepath.com>
- 77) [33008] Re: WTB: TenTec 9MHz Filters
by "John P. Spoonhower" <spoon@kodak.com>
- 78) [33009] Re: Software
by "Jim Kortge, K8IQY" <jokortge@mci2000.com>
- 79) [33010] GAP (fwd)
by Kevin Bunin <p014455b@pb.seflin.org>
- 80) [33011] 208 Tentec audio filter
by "Miguel" <eaqrp-c@arrakis.es>
- 81) [33012] Re: WTB: TenTec 9MHz Filters
by K5BDZ <K5BDZ@aol.com>
- 82) [33013] G QRP CLUB US REP
by George Dobbs <g3rjv@gqrp.demon.co.uk>
- 83) [33014] Re: QSL Card Software
by KB9RPD <KB9RPD@aol.com>
- 84) [33015] N/T+ Sprint Goofs
by camqrp@cyberg8t.com (Cam Hartford)
- 85) [33016] Feliz Navidad y prospero 1998, Merry Christmas.....
by "Miguel" <eaqrp-c@arrakis.es>
- 86) [33017] RV: Feliz Navidad y prospero 1998, Merry Christmas.....
by "Miguel" <eaqrp-c@arrakis.es>
- 87) [33018] CK722s, Transistors, and Chips
by adams@chuck.dallas.sgi.com (Chuck Adams)
-

Date: Sun, 16 Nov 1997 07:10:05 -0500
From: Paul Helbert <phelbert@rica.net>
To: mike@krypton.nmr.Hawaii.Edu
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [32932] Re: carbon fiber rods
Message-ID: <346EE29D.903173D5@rica.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hey Mike,

Is your source a secret?

;>) Paul, Wv3j

Mike W. Burger wrote:

> I just got a great kite building supply catalog.

Date: Tue, 16 Dec 1997 17:25:42 -0700
From: Gary Hembree <Gary.Hembree@ASU.edu>
To: qrp-1@Lehigh.EDU
Subject: [32933] [Fwd: N7IR ARRL 10 Meter SO/Mixed/QRP]
Message-ID: <34971C06.E25@ASU.edu>
MIME-Version: 1.0
Content-Type: message/rfc822
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

X-Mozilla-Status: 0001
Message-ID: <3496C3AD.6AE8@ASU.edu>
Date: Tue, 16 Dec 1997 11:08:45 -0700
From: Gary Hembree <Gary.Hembree@ASU.edu>
X-Mailer: Mozilla 2.0 (Macintosh; I; 68K)
MIME-Version: 1.0
To: 3830@contesting.com
CC: floydjr@interpath.com
Subject: N7IR ARRL 10 Meter SO/Mixed/QRP
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

ARRL 10 METER CONTEST -- 1997

Call: N7IR

Country: United States

Category: Single Operator QRP

MODE	QSO	QSO PTS	STATES	COUNTRIES
CW	181	724	25	13
SSB	38	76	7	8

Totals	219	800	32	21 = 42,400

All reports sent were 59(9) AZ, unless otherwise noted.

Equipment Description:

Ten Tec 546C at 5 watts output

Force 12 5BA at 73'

Club Affiliation: Central Arizona DX Association

Another of those "I'm just going to play in this one" contests. Stuck to the promise until the east coast opening on Sunday morning. What a rush! Got an 86 hour for the first time on QRP. Got the CT "Last 10" rate-meter to hit 137 at one point! Come on sun spots!

Total op time about 8 hours.

73

Gary, N7IR

Date: Tue, 16 Dec 1997 19:53:41 EST
 From: WB7WHI <WB7WHI@aol.com>
 To: qrp-l@Lehigh.EDU
 Subject: [32934] HW-8 final - thanks
 Message-ID: <53f5c22d.34972297@aol.com>
 Content-type: text/plain; charset=US-ASCII
 Content-transfer-encoding: 7bit

I want to thank all those that responded to my cry. It appears that someone removed the cobwebs from an obscure corner of the shack and found some of the critters (transistors) and is sending them over.

I've been telling myself for years that I was going to buy the HW-8 hand book and have yet to do it. Methinks I will move it to the top of the list as evidently a number of the substitutions mentioned came from there.

Thanks again.

Wayne WB7WHI

Spokane, Wa.

Date: Tue, 16 Dec 1997 17:59:58 -0700 (MST)
From: bertieh@dancris.com
To: vole@primenet.com
Cc: qrp-1@Lehigh.EDU
Subject: [32935] Re: New Novice/Tech+ Sprint
Message-ID: <199712170059.RAA01575@dancris.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi all..

We happen to have a General book, the new version that I'm more then willing to pass on!!!

What a great idea...I only wish that the N/T- fox hunts had been more popular last year...I would have enjoyed being a fox and I know that I would have upgraded a lot sooner then I did!!! Since March 15 is my birthday...I can't think of a more fun way to spend the day!!!

72,

Bertie
N7XJW

>Cam (N6GA) wrote:

>>

>> In the spirit of the Fox hunt, we are presenting a new sprint to
>> take place on the N/T+ band segments on March 15. Think of it as a
>> four-hour, multi-band Fox hunt where all of the N/T+ class licensees
>> are Foxes, and all of the General and above types are the hunters.

>> [...]

>> Many thanks to Joel Malman, WA1QVM, for the idea for this sprint.

>

>Great idea! Count me in! Now wouldn't it be neat if a
>bunch of us got together and bought a General upgrade
>manual for each N/T+ Fox who got on that night? I'll
>volunteer for one....

>

>Cheers de AB7TT,

>

>-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

>

Date: Tue, 16 Dec 1997 19:22:00 (-0500
From: "Dean T. Miller" <dtmiller@dsmnet.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>, w5usj@webwide.net
Subject: [32936] Re: 1955 Handbook
Message-ID: <199712170121.TAA25306@dsm7.dsmnet.com>

Hi Chuck,

> Date: Tue, 16 Dec 1997 08:50:53 -0600
> From: Chuck Carpenter <w5usj@webwide.net>

> If anyone can direct me to a source for a hardcopy of the 1955 "Handbook"
> I'd be most grateful.

What did you want from the book. I have a very frayed, coverless 1955
ARRL Handbook.

-- Dean -- from Des Moines (KB0ZDF)

Date: Tue, 16 Dec 1997 21:11:21 -0500
From: Paul Curtis <pccurtis@flash.net>
To: qrp-l@Lehigh.EDU
Subject: [32937] Trade?
Message-ID: <349734C6.7994@flash.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have an unbuilt A&A Engineering 30M Xcvr (cost \$159).

Will trade for 20M or 80M rig, built or unbuilt, of similar value, or
anything else interesting.

Paul Curtis, KE8VI
pccurtis@flash.net
** QRP-L #1285, MI-QRP #1599 **
** TS-450, NC40A **

Date: Tue, 16 Dec 1997 20:11:14 -0600
From: "Junius B. Fox" <w5hir@mail.phoenix.net>
To: qrp-1@Lehigh.EDU
Subject: [32938] Autotuner
Message-ID: <3.0.1.32.19971216201114.007be5e0@mail.phoenix.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Y'all,

I have a question regarding a Motorola Auto antenna tuner. I want to install the little gadget in the mobile installation using my Icom-706 (old version). Someone said it wouldn't work. Somehow, I am doubtful of this.. Anyone have any suggestions of ideas. I could try it, but I hate lash-up tests, as it often leads to erroneous results..

Foxy
w5hir@mail.phoenix.net

"success is recognizing a dead horse and burying it with the least ceremony"

Date: Tue, 16 Dec 1997 18:08:27 -0800
From: "Jim Johnson" <km7h@gte.net>
To: "qrp-1" <qrp-1@Lehigh.EDU>
Subject: [32939] OHR Rigs FS
Message-ID: <01bd0a90\$a6d4c60\$LocalHost@km7h>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

OHR Classic; \$180 shipped CONUS
OHR Explorer - 20 meter \$80 shipped CONUS
Both rigs are in fine shape.

Jim Johnson, KM7H	Mukilteo, WA
QRP ARCI #3497	ARS # 321
NWQRP #480	QRP-L #1219
CQC #444	AK-QRP #179

Date: Tue, 16 Dec 1997 20:15:26 -0600
From: "Junius B. Fox" <w5hir@mail.phoenix.net>
To: qrp-l@Lehigh.EDU
Subject: [32940] Pixie II
Message-ID: <3.0.1.32.19971216201526.007ba8e0@mail.phoenix.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I just received two of the HSC Pixie Kits. I was amazed at the condition that the box was in when the delivery service left it at the door. It looked like someone had played drop-kick with the box. I am surprised that the contents didn't fall out. But behold! when I opened the poor box, there were the two little Pixie Kits safe and sound. HSC had packed them between two large pads of foam.

Now for the true test. I'll build the little devils tomorrow. Stay tuned!

Foxy
w5hir@mail.phoenix.net

"success is recognizing a dead horse and burying it with the least ceremony"

Date: Tue, 16 Dec 1997 19:37:04 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: nsksousen@scientech.com (Niel Skousen)
Cc: qrp-l@Lehigh.EDU
Subject: [32941] Re: New Novice/Tech+ Sprint
Message-ID: <199712170237.TAA23338@usr08.primenet.com>
Content-Type: text

Howdy!

Niel (WA7SSA) wrote:

>
> > Great idea! Count me in! Now wouldn't it be neat if a
> > bunch of us got together and bought a General upgrade
> > manual for each N/T+ Fox who got on that night? I'll
> > volunteer for one....
>
> Joe, not a 'General' upgrade book, get the 'Advanced'... I'll bet most of
> them could already smoke the General just from lurking on the list..

Good point... How about those folks who are sponsoring a

N/T+ in the sprint ask 'em which they'd prefer (G/A/E)?
Of course along with the upgrade manual has to go a little
friendly, persistent badgering to take the test.... ;-)

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"Veni Vertical Vamos - I came, I radiated, I left". -AB7TT

Date: Tue, 16 Dec 1997 22:08:50 -0500
From: "HB Electronics (Bob Berlyn)" <hb_elec@ids.net>
To: qrp-L@Lehigh.EDU
Subject: [32942] Re: Software
Message-ID: <3.0.1.32.19971216220850.00a07ea0@mail.ids.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 05:25 PM 12/16/97, you wrote:

>>NOT QRP but I would like to know if anyone can tell me if the
>>programs, windraft or winboard are worth getting ????

>

SNIP

>Just go and down load a copy of Circad from <http://www.holophase.com> It's
>free and works great. I can't say enough good things about Circad. It's
>easy to learn and make a great looking schematic and board.

I agree with Steve. Circad is great. I recomend it.

Just a satisfied user.

Bob N1PWU QRP-L#161 East Greenwich, RI

HB Electronics
E-Mail: hb_elec@ids.net
On The Web: <http://users.ids.net/~hb_elec/>

Date: Tue, 16 Dec 1997 19:20:19 -0800
From: Yong Ku Cho <sungch@nwlinc.com>

To: "'qrp-l post'" <qrp-l@Lehigh.EDU>
Cc: "'Dave Benson (NN1G)'" <bensondj@aol.com>
Subject: [32943] Help: TiCK-1 with SW-40
Message-ID: <01BD0A57.AFDBEBE0@sungch.nwlink.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

I'm trying to put Embedded Research TiCK-1 to SW-40(40-40). I'd like =
know where can I inject side tone and what are the resistor values. If =
you are the one who knows about these please give me a help.
I'll appreciate your help.

73's n7zei, Yong.

Date: Tue, 16 Dec 1997 23:06:00 -0500
From: n3fel@juno.com (Howard D Rubin)
To: w5usj@webwide.net
Cc: qrp-l@Lehigh.EDU
Subject: [32944] Re: 1955 Handbook
Message-ID: <19971216.231711.9894.0.n3fel@juno.com>

Chuck,

I have a 1952 "Handbook" here. Are you looking for anything in
particular?

Regards, Howard, N3FEL

On Tue, 16 Dec 1997 08:50:53 -0600 Chuck Carpenter <w5usj@webwide.net>
writes:

>If anyone can direct me to a source for a hardcopy of the 1955
>"Handbook"

>I'd be most grateful.

>

>

>

>72/73

>Chuck, W5USJ

>Rains County (pop 6900), TX - EM22cv

>ARCI # 5422, QRP-L # 1306, FISTS # 3984

>

>

Date: Tue, 16 Dec 1997 23:17:08 -0500
From: n3fel@juno.com (Howard D Rubin)
To: kd1jv@moose.ncia.net
Cc: qrp-1@Lehigh.EDU
Subject: [32945] Re: Software
Message-ID: <19971216.231711.9894.1.n3fel@juno.com>

On the subject of CirCAD ...

The software is not free, only the demo. At \$995. for the full license, I will unlikely purchase the fully enabled code. I sure wish they would restrict a full version to a limited number of nodes or pins like WinBoard does. It does look interesting, though. After a very brief trial I am still unable to print a schematic to my ink jet printer. Has anyone been able to use the program with, say, an HP DeskJet600C?

Regards,
Howard, N3FEL

On Tue, 16 Dec 1997 17:25:40 Steven Weber <kd1jv@moose.ncia.net> writes:
>>Not QRP but I would like to know if anyone can tell me if the
>>programs, windraft or winboard are worth getting ????

>

>Save your money!!!

>

>I know someone who just bought winboard. After spending hours trying
>to get

>it to work, he found out there are some major bugs in the program that
>render it nearly useless. I'm sure he will speak up and you will all
>know

>who he is.

>

>Just go and down load a copy of Circad from <http://www.holophase.com>

>It's

>free and works great. I can't say enough good things about Circad.

>It's

>easy to learn and make a great looking schematic and board.

>

>72,

>

>

>Steve, KD1JV....In the White Mountains of New Hampshire

>

>"Melt Solder"

>

>

Date: Tue, 16 Dec 1997 22:24:28 -0600
From: ke4ke@juno.com
To: qrp-l@Lehigh.EDU
Subject: [32946] Want to buy QRP Rig....
Message-ID: <19971216.222455.6830.3.KE4KE@juno.com>

Hello All,

I have wanted to purchase a qrp multi band rig for a while. I just found out how close I live to Doc so I missed out on his 515!

Anybody interested in:
Yaesu Memorizer FM (I have two) or PK-232, 88?

Perhaps I would be willing to work a deal to get an Argonaut 515 or 509 with accessories by offering my Kenwood TS-140S? Something to chat about.

Tim
KE4KE@juno.com
formerly WA6PPU

Date: Tue, 16 Dec 1997 18:58:28 EST
From: KV1V <KV1V@aol.com>
To: qrp-L@Lehigh.EDU
Subject: [32947] Re: Output levels - volts peak to peak and dbm
Message-ID: <a44eb720.349715a8@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

<<

At 09:54 AM 12/14/97 -0800, Stanley Wilson wrote:

>Various articles, authors, etc.. seem to mix dbm levels and voltage RF
>levels. I do not believe I have seen it done on audio. But often we see
>a VFO that has an output of 1 Vp-p and a mixer that requires -10 dbm drive.

>

>I do believe that the dbm is always a 50 ohm load.
 >
 >What is a simple rule of thumb or conversion formula ?
 >
 >Or if I am using a balanced mixer that requires -10 dbm, what voltage do
 >I really need from the Local Oscillator? How many volts RF peak to peak
 >would I measure at 0 dbm level with a 50 ohm load ?
 >
 >They say the only dumb question is the one you don't ask. :-)
 >
 >thanks, Stan ak0b
 > >>

But to answer Stan's original question, the formula for converting dBm to Vpp
 with a 50 Ohm reference load is (da, daaaaa...)

$V_{pp} = 2 * 10^{((P-10)/20)}$
 where P is in dBm and Vpp is volts peak-to-peak.
 (for you non-BASIC types, "^" means "raised to the power")

Some representative conversions:

dBm	Vpp
-10	0.2
0	0.632
7	1.41 (Common for diode mixers)
10	2.0
20	6.32
30	20.0 (one watt)

Actually, when a vfo is driving a diode mixer, the impedance seems quite
 nonlinear and the resulting waveform is a mess. I've always assumed that the
 vfo should be tested into a 50 ohm dummy load when setting the output level to
 meet the mixer requirement.

Hope this is useful.

Bob Moore - KV1V

 Date: Tue, 16 Dec 1997 20:46:29 -0800 (PST)
 From: ron baldwin <rons@scruznet.com>
 To: qrp-l@Lehigh.EDU
 Subject: [32948] [2N2222] Happy Bday Mr. Transistor
 Message-ID: <103110700b0bde4eabed6@[204.179.134.134]>
 Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Two gold wires and a slice of germanium and the transistor was born
December 16, 1947.

I just thought it might be interesting think of the development of the
transistor at Bell Labs as we try and design the quintessential circuit
design using the 2N2222.

Lucent Technologies has a 50th anniversary site at:
<http://www.lucent.com/ideas2/heritage/transistor/index.html>

<http://www.lucent.com/ideas2/heritage/transistor/index.html>

Ron

Also at:

ron_baldwin@westvalley.edu

Amateur Radio Packet: KC6VJT@KI6EH.#CENCA.CA.US

(if you use packet, please e-mail me first)

WEB: <http://www.scruz.net/~rons/>

Date: Tue, 16 Dec 1997 20:59:47 -0800
From: "Frank Grigaliunas" <fgrig@iea.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [32949] Tube diagrams
Message-ID: <199712170459.UAA19139@comtch.iea.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Somebody on the web has been nice enough to show us some old ARRL tube
circuits, including, if I remember right, W1FB's Mighty Mite. Does anybody
know the URL?

--Frank, KC7YYR

Frank Grigaliunas, W. 1816 Dean, Spokane, WA 99201
fgrig@iea.com --*-- (509) 326-7147 --*-- <http://www.iea.com/~fgrig/>
"The Internet doesn't annoy people. People annoy people"

Date: Tue, 16 Dec 1997 22:02:54 -0700 (MST)
From: Paul Harden <pharden@aoc.nrao.edu>
To: ron baldwin <rons@scruznet.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [32950] Re: [2N2222] Happy Bday Mr. Transistor
Message-ID: <Pine.SOL.3.91.971216214948.9107A-1000000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 16 Dec 1997, ron baldwin wrote:

> Two gold wires and a slice of germanium and the transistor was born
> December 16, 1947.

^^^^^^^^^^^^^^^^^^

Hmmm ... just a few months after the Roswell Crash.
What a coincidence!

Seriously, thanks for bringing the birthday of the transistor to our attention. I remember when transistors first started working their way into designs, they were considered to be great for low level audio work, but the RF stuff would always be done with tubes. Now even the 100Kw shortwave broadcasters are all solid state xmtrs and transistors well above 10GHz not that hard to get.

But more important, these little solid state circuits have sure brought a lot of enjoyment to me and many others called QRPers. Somehow, a rig filled with 12AU7's and 6146 finals just kinda takes the fun out of FYB0!

Forget the 2N2222 contest ... I'm building mine out of 2N107's top hats.

72, Paul NA5N

But I'll admit ... you haven't lived until you've watched the glow in those 0A2 regulator tubes pulsate as you tap out "CQ" ...

Date: Wed, 17 Dec 1997 00:12:02 EST
From: AF5U <AF5U@aol.com>
To: qrp-1@Lehigh.EDU (Low Power Ham Radio Discussion Group)
Subject: [32951] New 6-meter QRP Rig
Message-ID: <7db9f589.34975f26@aol.com>

```
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
```

Cherokee Electronics: AH-50HT Amateur Radio 6-meter QRP Rig
For specs go --- > www.wirelessmarketing.com/sixmeter.htm
Scans: the Entire Band for Active FM Frequencies
Power: 5 Watts High, 1 Watt Low
Battery Pack: Sealed Nickel Cadmium
Memory: 5 Freqs
Full Repeater Capability: Normal & Reverse for 500 kHz & 1 MHz offset
CTCSS Tone Frequencies: Fully protone settings for coded signal
S-Meter: 15-segment Rx and Tx
Antenna Connector: BNC female
To Order Call Terry @ 800-949-7069 with VISA/MC

Date: Tue, 16 Dec 1997 22:12:09 -0700
From: Greg Newberry <newberry@cyberhighway.net>
To: rons@scruznet.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [32952] Re: [2N2222] Happy Bday Mr. Transistor
Message-ID: <34975F29.CB36EF97@cyberhighway.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Do any of you still have any CK722 transistors around? I think I've got two (somewhere) still in the original box..... Seems like a long time ago for that one.

Greg

— —

```
| Greg Newberry      newberry@cyberhighway.net |
| WB7DUO QRP-L #760 |
| NorCal #1899  CQC #465  AR-QRP #65  |
```

Date: 17 Dec 1997 00:30:25 -0500

From: "rohre" <rohre@arlut.utexas.edu>
To: qrp-1@Lehigh.EDU
Subject: [32953] Gap Titan, basics, guys, 80M
Message-ID: <n1329803849.29470@msmailgw1.arlut.utexas.edu>

Just had to add to the satisfied Gap antenna owners, and specifically the Titan model, the first all new commercial vertical I bought outright. (Others have been used, or club owned, etc.)

Really surprised at the comment from the 6 call who had a "flimsy Gap" and bad experience. Could not have been a Titan model!

However, for the education of those wondering about the models, I have worked with a friend and put up one of the earlier models for him some 7 years? ago, which had a V (five) in its model name. It was about the same weight as a Hy Gain 18 AVT I had up for a few years, which was replaced by my Gap Titan. Also, the earlier model I would guesstimate was about the weight and construction of R5's and R7's, (Cushcraft), which I helped friends and Field Day crews put up. (R5 & 7 and the MFJ's don't cover all of the bands like 40M and 20M where the Titan does.)

Now, when I got a Titan DX model, I got the surprise that it was the heaviest vertical I had ever handled! That was because the lower half is a multiple wall aluminum tube of Aircraft grade.

It is an Asymmetrical Vertical Dipole, as the article in an IEEE Engineering magazine calls this class of dipoles. As a dipole, it has two sections, just like your horizontal dipole, or a full half wave sloper dipole. Now for a half wave sloper you don't use radials, right? Nor for a horizontal dipole? Now why would you for any other half wave antenna, that is fed at or near the middle? Once you understand the premise of the Gap Titan as a half wave antenna, but just turned 90 degrees to the way we are used to the majority of dipoles, then you can understand the other design concepts it so cleverly incorporates. First and foremost, at 25 feet it is a tad short to be a half wave on 40 m, or even 20 M. Enter the "upside down capacity hat", or 'counterpoise wheel' as I have also called it. This is the radial like wheel structure the Titan has on its lower end, which consists of a full quarter wave of wire for 40M as the circumference conductor insulated on some spokes sticking out from the lower end. Now one end of this wire is electrically connected to a spoke which is electrically clamped by a mounting plate to the lower end of half of the dipole. That makes the lower part of the antenna below the insulating gap section something like 45 foot conductor, part vertical, and part coiled as one big turn. The end of the coil comes back and joins its start through an insulated section. It makes a substantial radiating device when compared to say the Butternut antennas, (which I have also installed and used), and which are quarter wave verticals that do need a counterpoise or radials to 'complete' the other half (of the dipole) they are not.

Now, back to the Titan. It has as much or more bandwidth on 80m as the Butternut, and much more than the Cushcraft models. True, the total vertical sections are 25 feet; but that is a tall Bug Catcher, and the capacity hat or counterpoise wheel must help as well. No Bugcatcher has this 100 kHz bandwidth without a tuner, conservatively. (Now all you mobile hams don't get me wrong, the Bugcatcher is a FINE mobile antenna!)

To make up the 50 ohm match at the insulator between the dipole sections on 80M, Gap uses the old tried and true stub technique of a coax quarter wave piece across the feed point. Cleverly, it is inside the upper tubing, which probably helped the tubing survive the tornadic winds my Titan went through during the nearby Jarrell tornado in May.

To shorten the amount of stub needed, they place potted ceramic caps in parallel with the upper end of the stub. One side of that end of the stub also connects to the upper end of the top dipole half tubing.

Now you hopefully have the full picture. A thickwalled lower section, joined by an insulator to a flexible, but damped for wind vibration, upper section. It is limber enough to give a bit in a wind, and swing back to vertical. However, with all that weight at the lower half that joins to your pipe mast or ground bracket, if you get a wind gust, you have a big heavy lever arm which might loosen your pipe you provide to anchor in the ground. My TV mast was lighter weight than the Gap tubing, so I beefed it up on the side away from prevailing high winds here with a steel angle iron driven in the ground with the TV pole. You could use a field fence post for the same effect. Just u-bolt these to the mast you are using to hold up the Titan. My mast is only six feet tall, but before I guyed the Titan, a 40MPH gust pivoted the antenna into the branches of a nearby oak tree. My undersized base tubing just laid over, but the Gap straightened right up when I pushed back my TV mast, and hammered the angle iron into the ground. Nothing on the linear decouplers, (that look like trombone slides), was damaged. (These are the tuning elements that replace lossy traps and inductors with open transmission line sections to resonate the various tubing sections to the various bands, another innovation of Gap.)

Since that experience, I added three guys of Wal Mart nylon rated at 880 pounds each. I just tied them to the tubing near the center insulator with a clove hitch. Nylon does stretch, thus, when it does, I go out and take up the slack with old Boy Scout knots. Even if I don't take up all slack, the guys keep things from whipping around, as they did even slack, during the May storm. Next door, a couple trees were detopped. My Titan is in the back yard, but in my front yard, the winds took 3 large limbs off a 21 year old pecan tree. Down the street, one tree was laid over at the base. On estimate was we had 70 mph winds during the tornadic storm. I think Skywarn calls these straight line winds, and it looked like a big club had come down the street swatting the trees. But the Titan rode it out just fine. I have never had to retighten any of the clamps that mount its decoupler insulators, nor

any of the main tubing joints.

The antenna has been an amazing performer working both the expected DX, and more frequently than not, close in skip as well, such as New Mexico and the Texas Valley on 20M. On 80M, it has worked into Kansas, around Texas, as well as longer skip. It has outperformed all my other vertical experiences, while at a low point of the sunspot cycle.

Now, as certainly the price is a factor for some, I would hasten to point out that you could build your own tubing, (or even wire) vertical dipole, (if you have a high tree limb to suspend the wire). You could parallel some dipoles beside it for the other bands, as in the "sleeve fed" beams where one dipole is fed, and others parasitically excited. It think you could load the dipole on one end, with the wheel idea, and stub match the central feed, to get on 40 and 80M. I am kind of sorry I did not know about the asymmetric vertical dipole as a class of common AM Broadcast antennas in South America, before I bought the kit, for I think with some effort, one could do a wire version for certainly a lot less money.

Finally what swayed me was the materials availability of aluminum tubing was not good in my area, and the time factor. Time is money, even ham time. I paid good money, but I got good value, and George's clever ideas implemented with me doing some very minimal labor.

The Gap folks, Richard and George, that you see at the shows, are helpful and quick to fix things like the loss of some hardware out of my box due to overeager summer UPS help during shipping.

Another local ham friend bought the Voyager, and has great results with it on the lower bands it covers. But at 45 feet tall, it was more than I could handle in my small yard. It certainly is to be considered if you are mainly a 160 and 80M type.

Hey, the whole company signed and sent out Christmas cards this year! Now that is a first!

Whatever you do, enjoy your antenna!

Stuart K5KVH (not a stockholder, but sometimes wish I were!)

Date: Tue, 16 Dec 1997 22:41:43 -0800
From: Bill Todd <bill@techline.com>
To: nwq-1@scn.org
Cc: qrp-1@Lehigh.EDU
Subject: [32954] Do you know these QRPers?

Message-ID: <1.5.4.32.19971217064143.007201e0@mail.techline.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hello QRPers -

I have received a few "undeliverable" return messages from the following QRPers, when I attempted to send them their bi-monthly "MWQ" E-mail newsletter.

If any of you know the correct E-mail address for any of these folks, I'd appreciate getting it so I can send the newsletter.

They are:

KK7HE Balaji Gopalakrishnan

K6KRV Dennis Steele

K3TKS Danny Gingell

K4ADI Frank Lamb

WD4ET Jeff Greer

W6JHB Jim Bennett

KK6M David Godden

Thanks, Bill-N7MFB

Date: Wed, 17 Dec 1997 00:29:59 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [32955] FYBO: Field Op Seeking Partners!
Message-ID: <199712170729.AAA28440@usr04.primenet.com>

Howdy Folks,

An intrepid QRPer in central Utah is looking for fellow QRPers who are crazy enough to want to set up a field site for the AZ ScQRPions' FYBO Winter QRP Field Day on Feb 7th.

If you're a UT critter who fits that description, please email me and I'll get you in touch with each other.

Speaking of which, now's the time to start planning if you're hoping to put a field station on the air for FYBO! Some QRPers in the Great Lakes area are already sniffing out a primitive cabin alongside a frozen lake, and a bunch of AZ/NM QRPers are planning a secret rendezvous near the border at about 7000 ft ASL.

If you'll be operating with a group, we strongly encourage you to put up multiple antennas/rigs so everyone can get their callsigns on the air!

Remember, you can set up your antennas as far in advance as you like. Put up that rhombic of your dreams! Then just hope they survive the intervening winter storms. ;-)

And as always, SAFETY FIRST! Please let folks at home know where you're going and when you expect to be back. Respect the WX and your own limitations at all times.

We plan on having last year's FYBO Tales of Adventure on ScQRPion Bob (KI7MN)'s website soon (we just need to get permission from the authors), so that'll give everyone a chance to read up on all the fun!

Rules for FYBO '98 are posted at <www.dancris.com/~ki7mn> or you can send email to me. Sure hope to hear you out there. We promise it'll be a unique operating experience in your ham career! Great stories for the campfire that your kids and grandkids will never believe! ;-)

"Why it was so cold that day, the RF just froze at the antenna and fell to the ground. Come Springtime, the valley echoed with "CQ FYBO DE..." for weeks as the RF thawed out!"

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"If it ain't fun, you ain't doin' it right!" -The AZ ScQRPions

Date: Wed, 17 Dec 1997 02:40:42 EST
From: AF5U <AF5U@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [32956] Cherokee SSB CB HT
Message-ID: <8c842e8f.349781fc@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

There is a great little HT SSB CB rig that can be converted to 10 meters. To get the specs, check out www.wirelessmarketing.com. The rig may be ordered from Ms. Terry Lynch at 800-949-7069 using MC/VISA. Just tell her that you know me, David Little, and that you are a ham. Terry will send you the data on the CB-to-10 meter conversion in the UPS package with your new Cherokee SSB rig.

Date: Wed, 17 Dec 1997 06:59:39 -0500 (EST)
From: Bensondj@aol.com
To: sungch@nwlink.com
Cc: qrp-1@Lehigh.EDU
Subject: [32957] Re: Help: TiCK-1 with SW-40
Message-ID: <971217065939_109731671@mrin39.mx>

Yong-

Thanks for writing-

>>Subj: Help: TiCK-1 with SW-40
>>Date: Dec 16, 1997 11:36 PM EDT
>>From: sungch@nwlink.com
>>To: qrp-1@Lehigh.EDU ('qrp-1 post')
>>CC: bensondj@aol.com ('Dave Benson (NN1G)')

>>I'm trying to put Embedded Research TiCK-1 to SW-40(40-40). I'd like know where can I inject side tone and what are the resistor values. If you are the one who knows about these please give me a help.<<

Sure- lift the input end of the 4.7M resistor which is across the muting FET (Q1). Connect the TiCK sidetone to this "flying" or unconnected resistor lead. You may need to experiment with the value of the resistance to set the sidetone level, it will probably need to be increased.

73, Dave- NN1G

Date: Wed, 17 Dec 1997 08:35:02 -0800
From: K3TE <qrp@earthlink.net>
To: qrp-l@Lehigh.EDU
Subject: [32958] Argo556 for sale; Argonaut 509 for sale
Message-ID: <3497FF36.3B07@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

TenTec Argo 556, noise blanker, 80,40,30,15 and 10 meter modules,
manual, power cable, mobile mount. Very good condition. \$425

TenTec Argonaut 509 with 208 filter, manual, good condition, \$235

Thanks for the bandwidth - k3te

Date: Wed, 17 Dec 1997 08:04:14 -0500
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: "INTERNET:vole@primenet.com" <vole@primenet.com>, QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>
Subject: [32959] FYBO: Field Op Seeking Partners!
Message-ID: <199712170809_MC2-2C4D-D537@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Joe:

We at MN/QRP will be in there, too. Looking at various local lakes for
our setup. Will probably either rent an ice fishing house or put up a
tent.

Antenna: I recommended 16 halfwave dipoles in phase <VBG>. But we may
settle for something a little less challenging :-).

It should be cold enough here in Minnesota for some serious multipliers.

Good luck everyone, and Happy Holidays.

72/73,

--Doc/K0EVZ qrp-1 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42
DXCC 73/44 <>< FOX Total 12/11/97 17 of 21. Was the FOX 11/25/97.

Icom 751A Omni V Corsair I Sierra Argo 515 Norcal 40a SW-40 49er
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D GAP TNT/2 Windom
SLV/W6MMA G5RV 599ZX Autek QF-1 RS DSP-40 **Grid Square EN34**

"Things should be as simple as possible, but no simpler"--A. Einstein

Date: Wed, 17 Dec 1997 08:17:44 EST
From: nq2rp@juno.com (B/BAMS Club Station)
To: qrp-1@Lehigh.EDU
Subject: [32960] Re: Cherokee SSB CB HT
Message-ID: <19971217.081638.4799.0.nq2rp@juno.com>

----- Begin forwarded message -----
>From: AF5U <AF5U@aol.com>
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: Cherokee SSB CB HT
>Date: Wed, 17 Dec 1997 02:40:42 EST

>There is a great little HT SSB CB rig that can be converted to 10
meters. To

-----< snip
>-----

I just helpd a local here with the Cherokee 10 M SSB HT conversion. A
nice radio, but there are some unexplained gaps in the 10 Meter coverage.
Locally, we use 28.400 and 28.455 MHz for calling frequencies. The
Cherokee would hit the 455 spot but not 400.

I spoke with Ray at East Coast Amateur Radio about this (the local
Cherokee dealer), and he thinks that it has something to do with the
"gaps" between the regular CB channels in the stock configuration. These
gaps are for the R/C channels on the 27 MHz band.

We didn't try the Cherokee on the "stock" CB channels, and never noticed
the gaps before conversion. A nice package for the price, even cheaper
than the used HR-2510's out there...

Has anyone done a conversion that fills in the gaps?

72/73, Keith, WB2VUO at the keys at B/BAMS
NQ2RP - QRP-L # 1294,
Byron/Bergen Amateur Microwaves System Club Station
Listen for our 10 Mtr Milliwatting Beacon: 125 mW @ 28.287 MHz
"Our night light runs more power than our Rig!!!"

Date: Wed, 17 Dec 1997 08:17:44 EST
From: nq2rp@juno.com (B/BAMS Club Station)
To: qrp-l@Lehigh.EDU
Subject: [32961] Re: 6 Meter QRP
Message-ID: <19971217.081638.4799.1.nq2rp@juno.com>

The AH-50 is sold through East Coast Amateur Radio here in the WNY area.
It's a nice HT, and does everything it's advertised to, but I wish it had
more memories.

On an external power source, such as the car battery, it's just over the
QRP catagory, running in the 6.0 - 7.5 watt range. The accessories are
compartable with other HT's, so you aren't stuck buying just the Cherokee
line for speaker-mikes, power cords, batteries, etc...

AES and HRO also advertise the radio.

72/73, Keith, WB2VUO at the keys at B/BAMS
NQ2RP - QRP-L # 1294,
Byron/Bergen Amateur Microwaves System Club Station
Listen for our 10 Mtr Milliwatting Beacon: 125 mW @ 28.287 MHz
"Our night light runs more power than our Rig!!!"

Date: Wed, 17 Dec 1997 07:20:40 -0600
From: "Rattray, Bruce" <Rattray@siast.sk.ca>
To: "'rhands@hwcn.org'" <rhands@hwcn.org>, Low Power Amateur Radio Discussion
<qrp-l@Lehigh.EDU>
Subject: [32962] RE: Paddle arrives
Message-ID: <ABB04875E11AD01191A40000F83092BE566F75@stone.siaast.sk.ca>
MIME-version: 1.0

Content-type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: 7BIT

Way to go Ron!...you must have an "in" at Customs...my paddle got "stuck" at Customs in Calgary...didn't even come to Regina Customs...they wanted me to send them an invoice completely describing all the parts...what invoice?...HI HI...so I had to Fax 8 pages of material completely describing the paddle...thank goodness the information is all on the NorCal Web Page, so I just downloaded it...and then the mail strike started so I had to wait for that to finish...anyway I have the paddle assembled and it's a little beauty...next step will be finishing the base...yes I've used it on the air; couldn't resist...HAR!...Merry Christmas and Happy New Year!...72 - Bruce(VE5RC & VE5QRP) QRP-L#886
e-mail: rattray@gpfn.sk.ca

-----Original Message-----

From: Ronald Hands [SMTP:rhands@hwcnc.org]
Sent: Tuesday, December 16, 1997 5:00 PM
To: Low Power Amateur Radio Discussion
Subject: Paddle arrives

Found a neat package in my mailbox today. Six days from Norcal to Ontario -- not too shabby in the middle of the Christmas season -- and it must have whizzed right through Canada Customs without stopping. Thanks Norcal, Jim, Canada Post, the USPS and anyone else who helped.

Ron VE3SP
Hamilton, Ontario
rhands@hwcnc.org
QRP #464 CQC #362 ARRL

Date: Wed, 17 Dec 1997 08:24:36 EST
From: WB0NZM <WB0NZM@aol.com>
To: qrp-l@Lehigh.EDU
Cc: n3fel@juno.com

Subject: [32963] Re: Software
Message-ID: <5dcc6e2d.3497d29a@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

In a message dated 97-12-17 01:04:22 EST, you write:

<< On the subject of CirCAD ...

The software is not free, only the demo. At \$995. for the full license, I will unlikely purchase the fully enabled code. I sure wish they would restrict a full version to a limited number of nodes or pins like WinBoard does. It does look interesting, though. After a very brief trial I am still unable to print a schematic to my ink jet printer. Has anyone been able to use the program with, say, an HP DeskJet600C? >>

On the subject of the Circad pricing:

Hams can purchase it for \$295. One of the developers of Circad is a ham (he's developed part of the autorouting routines), and he made an arrangement with the owner of Holophase, to sell Circad to other hams, for \$295, for the full commercial package. The only difference with purchasing it at this price is that technical support would come from him, and NOT from Holophase.

If anyone would like his call, name, and phone number, I'll post it here. At \$295 for the full package, this makes it one of the best 'deals' there is, as compared to other packages on the market.

I've found that the demo is very functional. It is limited in that a gerber plot file can not be generated, and the size of the schematic or pcb file is also limited. However, this limit in file size has not posed any problem for me, as of yet, at all. A sizable schematic can still be drawn with it.

As to printing to an ink jet printer, try this:

Under the File Menu, Plotter Output, Plotter Setup, set the Output Port to the correct printer port, such as PRN1 (if your printer is on LPT1). Set the Output Type to PCL3, or PCL4, depending upon whether your printer will print 300 dots per inch or 600 dots per inch. I have mine set on PCL3, even though the printer will print 600 dots per inch, and it works well.

If the above doesn't work, try setting the output to BJC2 or BJC4.

If it still doesn't work, let me know and I'll try to figure out what else might be wrong, as I'm sure that it should print to an ink jet printer. I've got such a printer at my office, and I'll try it there, to see if it works.

Do the above is assuming that the printer is hooked directly to the computer.

If you're printing to a printer through a network, then you will have to print to a .PCL file, and then COPY that file, in a binary mode, to the printer, over the network.

Disclaimer - I do not have any connections with Holophase, or with the ham who is selling it to other hams. I'm just a very happy user of the demo (until I soon buy the full package).

John
Springfield, MO

Date: Wed, 17 Dec 1997 08:31:18 -0500
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: "INTERNET:rohre@arlut.utexas.edu" <rohre@arlut.utexas.edu>, QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>
Subject: [32964] Gap Titan, basics, guys, 80M
Message-ID: <199712170835_MC2-2C43-DA1B@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Stuart:

My experience with both the GAP Titan and the company has been extraordinarily positive. Couldn't be more satisfied.

The antenna went together without a hitch. It is amazingly sturdy and should be just fine here in Minnesota winter weather. And some years we get a tiny bit of ice and *occasionally* a light covering of snow :-(. Has *already* withstood 70mph straightline winds.

I do have it guyed. Bought one of the their "guying kits". Cost about \$22.22 at Burghardt's. It is two pieces of aluminun which clamp together. The clamp is held together by two eyebolts where the guy ropes attach. Goes just above the yellow "gap" section. Net result is ultra stable and in the winds my Titan hardly even flexes.

Have just begun operating 80 metres. The Titan seems to get out FB, and I QSOed MS just two nights ago. Sure solves my space problem for 80.

My \$.02 worth. Happy Holidays, everyone! Usual disclaimers: no commercial interest or consideration, your results may vary, caveat emptor, etc.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42
DXCC 73/44 <>< FOX Total 12/11/97 17 of 21. Was the FOX 11/25/97.

Icom 751A Omni V Corsair I Sierra Argo 515 Norcal 40a SW-40 49er
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D GAP TNT/2 Windom
SLV/W6MMA G5RV 599ZX Autek QF-1 RS DSP-40 **Grid Square EN34**

"Things should be as simple as possible, but no simpler"--A. Einstein

Date: Wed, 17 Dec 1997 08:04:19 -0500
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: "INTERNET:bill@techline.com" <bill@techline.com>, "Doc W.D. Lindsey/K0EVZ"
<70511.3041@compuserve.com>, QRP-L Discussion Group <QRP-L@Lehigh.EDU>
Subject: [32965] Do you know these QRPers?
Message-ID: <199712170809_MC2-2C4D-D538@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Bill:

Danny Gingell K3TKS should be easy to re-locate. He is often a contributor to ARCI QRP Quarterly. In the most recent issue (Oct-97) he edited the ARP Net Information column (p. 45).

On the back cover his URL is shown as K3TKS@abs.net. Good luck and Happy Holidays.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42
DXCC 73/44 <>< FOX Total 12/11/97 17 of 21. Was the FOX 11/25/97.

Icom 751A Omni V Corsair I Sierra Argo 515 Norcal 40a SW-40 49er
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D GAP TNT/2 Windom
SLV/W6MMA G5RV 599ZX Autek QF-1 RS DSP-40 **Grid Square EN34**

"Things should be as simple as possible, but no simpler"--A. Einstein

Date: Wed, 17 Dec 1997 08:47:07 -0500
From: mikemo@ibm.net
To: rons@scruznet.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [32966] Re: [2N2222] Happy Bday Mr. Transistor
Message-ID: <3497D7DB.79BF@ibm.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

ron baldwin wrote:

>
> Two gold wires and a slice of germanium and the transistor was born
> December 16, 1947.
> I just thought it might be interesting think of the development of the
> transistor at Bell Labs as we try and design the quintessential circuit
> design using the 2N2222.
> Lucent Technologies has a 50th anniversary site at:
> <http://www.lucent.com/ideas2/heritage/transistor/index.html>

Wow, the article under "history" is fascinating. I learned a bunch about the dawn of the semiconductor industry. I also found it interesting that William Shockley was not directly involved with the development of the first functioning transistor. He did, however, describe why it worked. The first experimenters thought that surface effects caused the gain, where Shockley described the "bulk propagation" where the gain was caused by carriers in the bulk of the device.

Recommended reading!
72 de kf4trd

Date: Wed, 17 Dec 1997 08:59:57 -0500
From: "John P. Spoonhower" <spoon@kodak.com>
To: qrp-1@Lehigh.EDU
Cc: spoony@eznet.net
Subject: [32967] FS: Kenwood R-2000 rcvr + manuals
Message-ID: <3497DADD.795@kodak.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Everyone, I am selling an excellent condition R-2000 rcvr with

both operating and service manuals for \$325 + shipping.
The rcvr comes with both wide and narrow filters for voice modes
(AM/FM/SSB) but does not include the 500 Hz CW filter. The R-2000
is a general coverage rcvr , all-mode, with coverage from 100 kHz to
30 MHz.

72, John, kc2du

Date: Wed, 17 Dec 1997 08:31:24 -0500
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ"
<70511.3041@compuserve.com>
Subject: [32968] TKS:Help w/Timewave 599ZX
Message-ID: <199712170835_MC2-2C43-DA1C@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Gang:

Many thanks to all for your help with the Timewave problem. Checked out
a large number of suggestions. Even talked with the company. Turns out
the problem is simple--a bad cable :-(. Wow!

So now this is a happy camper. The unit really is fantastic. So I say,
watch out FOXes.

Happy Holidays to one and all!

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42
DXCC 73/44 <>< FOX Total 12/11/97 17 of 21. Was the FOX 11/25/97.

Icom 751A Omni V Corsair I Sierra Argo 515 Norcal 40a SW-40 49er
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D GAP TNT/2 Windom
SLV/W6MMA G5RV 599ZX Autek QF-1 RS DSP-40 **Grid Square EN34**

"Things should be as simple as possible, but no simpler"--A. Einstein

Date: Wed, 17 Dec 1997 09:45:24 -0500 (EST)
From: Steve Slavsky <sslavsky@CapAccess.org>
To: qrp-1@Lehigh.EDU
Subject: [32969] QSL Card Software
Message-ID: <Pine.SUN.3.91-FP.971217093256.17839A-100000@cap1.capaccess.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Does anyone know of freeware/shareware etc. for making QSL cards on your PC? Or have some templates that can be used in MS Word or MS Draw? I would like to customize QSLs based on the event/location and have access to a decent color printer. I have not been able to find anything on the WWW about this yet. I'm not a graphic artist, so I do a lot better modifying something that's been developed.

Any help is appreciated (please do not mail any graphics to this address, it's text only - responses that include graphic enclosures should go to radioham@erols.com). Thanks.

72/73,

Steve, N4EUK
Reston, VA

Date: Wed, 17 Dec 1997 09:47:49 -0500
From: MJMULLINS@dow.com
To: <qrp-1@Lehigh.EDU>
Subject: [32970] Iambic A or B
Message-ID:
<c=WW%a=ATTMAIL%p=DOW%l=TXNTE10-971217144749Z-85932@mante02.nam.dow.com>

OK, I've got the NorCal paddles put together, and I programmed an 87C750 microcontroller (8051 variant from Philips) to use for a keyer.

I've never used a paddle before. I started out with iambic B (sends the opposite dit or dah if you release the key before the end of the current dit or dah). I've only practiced for a few minutes so far, but I'm surprised at how difficult it is to send at reasonable speed with an

MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

Thanks Dave,
You always help me a lot. I am going to try with this and couple of =
project on holiday vacation. If I success I'll post what I've done for =
other hams.
73's n7zei, Yong.

-----Original Message-----

From: Bensondj@aol.com [SMTP:Bensondj@aol.com]
Sent: Wednesday, December 17, 1997 4:00 AM
To: sungch@nwlinc.com
Cc: qrp-1@lehigh.edu
Subject: Re: Help: TiCK-1 with SW-40

Yong-

Thanks for writing-

>>Subj: Help: TiCK-1 with SW-40
>>Date: Dec 16, 1997 11:36 PM EDT
>>From: sungch@nwlinc.com
>>To: qrp-1@Lehigh.EDU ('qrp-1 post')
>>CC: bensondj@aol.com ('Dave Benson (NN1G)')

>>I'm trying to put Embedded Research TiCK-1 to SW-40(40-40). I'd like =
know
where can I inject side tone and what are the resistor values. If you =
are the
one who knows about these please give me a help.<<

Sure- lift the input end of the 4.7M resistor which is across the =
muting FET
(Q1). Connect the TiCK sidetone to this "flying" or unconnected resistor
lead. You may need to experiment with the value of the resistance to =
set the
sidetone level, it will probably need to be increased.

73, Dave- NN1G

Date: Wed, 17 Dec 1997 10:33:41 -0500
From: Todd Nichols <nichols@rtp.ericsson.se>
To: qrp-1@Lehigh.EDU
Subject: [32973] Re: Software
Message-ID: <3497F0D5.129B@rtp.ericsson.se>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Steve Weber wrote:

>>NOT QRP but I would like to know if anyone can tell me if the
>>programs, windraft or winboard are worth getting ????
>
>Save your money!!!
>
>I know someone who just bought winboard. After spending hours trying to get
>it to work, he found out there are some major bugs in the program that
>render it nearly useless. I'm sure he will speak up and you will all know
>who he is.
>
>Just go and down load a copy of Circad from <http://www.holophase.com> It's
>free and works great. I can't say enough good things about Circad. It's
>easy to learn and make a great looking schematic and board.
>
>72,
>
>Steve, KD1JV....In the White Mountains of New Hampshire

I have to respond to this. "Major bugs" and "nearly useless" are not my experience.

Schematic capture and pcb layout programs are very personal things. Folks invest a lot of time, blood, sweat, tears, curses, and etc. in them. If you don't believe me, go over to the newsgroup sci.electronics.cad and check out the despair there :-)

Y'all have seen the announcement by Bob Kellogg reagarding the Knightlites' kit, the Knightlite SMiTe. It is perhaps a little premature to talk about this, but recent CAD discussions make this a good time :-). We are using WinDraft and WinBoard as the "official" Knightlite CAD software, and we are doing (have done, actually) the SMiTe with these programs. I'll tell you the pro's and con's AS WE SEE THEM, and you can decide for yourself.

WinDraft, WinBoard, and GerbTool (a gerber file previewer) are available FREE for the 100 pin versions from Ivex's web site at <http://www.ivex.com/>. The software comes with a rather extensive

library, and is incrementally upgradeable (buy x more pins for y dollars). Also, documentation for the FULL manuals for both programs, AND a tutorial are available on the web site (the manuals are in Word format). We are making this software the "official" KL software, so that we may place design files on our web site, available to all who wish to see AND use them. You can use them by downloading and installing the FREE, small version. You can also take a design all the way from conception (schematic) to production (gerber files), doing electrical rule checking, design rule checking, creating BOM's (bill of materials), and doing other CAD-specific tasks along the way.

I have used many different CAD tools as a practicing RF and microwave engineer. I have installed and run demos of just about everything out there THAT IS EASY TO GET (i.e., easy to quickly download from somewhere). It is important in evaluating this kind of software to take a design all the way from schematic capture to netlist generation to pcb layout to gerber generation, simply in order to evaluate the product. This requires the existence of a tutorial document, or at least a minimal set of documentation. Ivex is the only vendor I have seen to provide this level of documentation, particularly for the free/evaluation version (Microsim's Pspice now meets this criterion, and others seem to be following suit with the increasing distribution of demo/eval software on CD-ROM).

Regarding bugs: all CAD software that runs under Windows (and most that don't :-) has bugs. Some are more irritating than others. This is the main reason that I consider good basic/tutorial documentation a requirement: without it, one cannot tell the difference between a bug and not knowing how to use the program. Yes, WinDraft and WinBoard have some bugs. And I admit that I have not stressed the program (I have not done a 10 sheet schematic with mixed surface mount and thru-hole parts, which is a mixed digital and RF design :-). But I HAVE successfully completed several schematics and a couple of pcb layouts. Once I LEARNED the software, it was no problem. That seems to be the crux of the problem: LEARNING the software. It is rather pointless to down the user interface before learning how to use it (of course, afterwards, one is free to dis it all one wants :-).

Of course, all this diatribe begs the question: have I ever tried Circad? Yes, twice. I found it VERY difficult to use. Why? I'm no stranger to CAD software, or pcb layout. There was no tutorial or documentation! I did find the Circad FAQ, but it was very limited and assumed that you knew how to use the software. And having to call someone for basic information is not acceptable.

I still don't like the interface, but I can't give it a fair chance due to lack of docs. I don't have time to twiddle with it and to learn it by trial and error (this is what the documentation buys you). I know the demo version of Circad is free; so is the demo version of Ivex's software. And - much as it pains me to say it :-) there are times when having a program behave "correctly" under Windows is an advantage. Steve is probably just as fast with Circad as I am with Ivex, but he likes one and I like the other. We always hate using something we don't know how to use.

I don't mean to belittle anyone's choice of CAD software. Use what works for you. But don't cheat yourself out of evaluating a product because you have heard negative things about it. I encourage folks on this list to seek out ALL the CAD products available, to obtain the free versions of those that will let you do a small but complete design, and to wring them out and to pick the one that you like. Some vendors make that easier than others. And, finally, NEVER sink a lot of money (or any money :-) into a CAD product without some kind of evaluation. You owe it to yourself.

Disclaimer: I don't work for Ivex.

Todd

--

Todd Nichols KB0HQU Ericsson Inc. (919) 472-7590
nichols@rtp.ericsson.se Research Triangle Park, NC
.sig is offline

Date: Wed, 17 Dec 97 10:30:19 -0500
From: Kevin.B.Walker@ait6.ameritech.com
To: qrp-1@Lehigh.EDU
Subject: [32974] Introduction
Message-ID: <H0000755069a5243@MHS>
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; name="Introduction"
Content-Disposition: attachment; filename="Introduction"
Content-Transfer-Encoding: quoted-printable

Just joined the list after lurking around the web site reading many postings. I'm a relatively new ham (May 96) so there is much to learn and this looks like a great list server. I found this area because of a=

interest in building a QRP kit. Just finished a OHR100A 30 meter version. No contacts yet, but hopefully soon. Other rig is a TEN TEC Omni-C and my antenna is a G5RV. Currently finishing a set of Norcal paddles...looking forward to using them and setting aside the straight key!

Kevin/KB9NUN
Oswego, IL

Date: Wed, 17 Dec 1997 09:53:33 -0600
From: "Jeff M. Gold" <jgold@tntech.edu>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [32975] DX on 20 meters
Message-ID: <3497F57D.1B053629@tntech.edu>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

Hello,

well it has been a perfect time to have finished building my 20 meter kit. At about 7:30 am Central time, the band is packed with DX. This AM spent a good amount of enjoyable time talking with a gent in Wales, he was about 439 with his 100 watts and he gave me a 349. But the bottom line is we talked for a nice while and 100% copy on both sides of the pond. Only major problem seems to be with having to get to work more or less on time. It appears to be seriously intefering with my hobby time. I would find a rich woman to support me, but everytime I manage to do this, my XYL makes me give her back.

Have a gud'un

72

Jeffro, AC4HF

--

Jeff M. Gold, Manager
Academic Computing Support
Tennessee Technological University
(615)372-3979

Date: Wed, 17 Dec 1997 10:13:45 -0600
From: "STUART B.D.HUNT" <stuart001@ameritech.net>

To: stuart001@ameritech.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [32976] Re: FS: QRP+ original model
Message-ID: <3497FA38.B30A47E5@mailhost.chi.ameritech.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

STUART B.D.HUNT wrote:

> v.g. rig with updated EPROM. Reason; using IC-706 for QRP and QRO
> ..need space. \$450 with mike and manuals, I ship COBUS. Great xmas gift
> to yourself!
> Merry xmas to all 72
> Stu KB9NAE Qrp-1 1222 Tel/Fax 847-295-6941

I find that my price is too high. I am reducing it to \$400 which is v.
fair.Stu KB9NAE

Date: Wed, 17 Dec 1997 09:19:10 -0700
From: "Dr. Kenneth Cavcey" <cavcey@boulder.nist.gov>
To: qrp-1@Lehigh.EDU
Subject: [32977] PCB Artwork Software
Message-ID: <3.0.2.32.19971217091910.007ad2d0@central.blrdoc.gov>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

There is a program called PIA21 that does a fine job
with 3 layers. It is a windows program and several versions
are available.

Will the person seeking this kind of software please give me
your email address?

W0YOR CQC #50 QRP #1000

Date: Wed, 17 Dec 1997 11:25:28 -0500
From: "Bob Kellogg" <ae4ic@nr.infi.net>

To: <newberry@cyberhighway.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [32978] Re: [2N2222] Happy Bday Mr. Transistor
Message-ID: <199712171640.LAA13678@mailhost.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Yep, I've got a couple of the real early ones, and a booklet of transistor projects.

Bob Kellogg, AE4IC, Greensboro, NC
Probably, but not necessarily. -- Benny Hill

>
> Do any of you still have any CK722 transistors around? I think I've got
> two (somewhere) still in the original box..... Seems like a long time
> ago for that one.
>
> Greg

Date: Wed, 17 Dec 1997 11:12:49 -0500
From: "W. D. (Doc) Lindsey" <70511.3041@compuserve.com>
To: "INTERNET:Kevin.B.Walker@ait6.ameritech.com"
<Kevin.B.Walker@ait6.ameritech.com>
Cc: QRP Discussion Group <qrp-1@Lehigh.EDU>, "Doc (W.D.) Lindsey/K0EVZ"
<70511.3041@compuserve.com>
Subject: [32979] Introduction
Message-ID: <199712171116_MC2-2C49-4E59@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Kevin:

Welcome aboard, and you are right--this is a terrific group of QRPers and the quality of the reflector shows it.

You will always have your own Tech Service here. For instance, recently I asked for help in getting an Icom 751A and Timewave DSP talking with each other. Before the day was out, 8 different people had responded. Plus Icom themselves sent a response. And among the suggestions was the exact

solution. We're up and running FB. Wow!

Good luck with your 100A. Have worked several of them, and they give an excellent account of themselves. Will be interested in hearing your progress.

Again, welcome aboard and Happy Holidays.

72/73,

--Doc/K0EVZ qrp-l 861

Date: Wed, 17 Dec 1997 17:11:38 +0000
From: Ed Loranger <we6w@qsl.net>
To: WB7WHI@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [32980] Re: HW-8 final - thanks
Message-ID: <349807CA.24EE@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Wayne, I have an HW-8 and would like to go 5 watts or so.
In the responses you received, do you have a list
of viable transistors, even just the 2 watt, that
are good replacements?

Tks in advance.

-Ed, we6w

--

72/73 de we6w qrp es CW ONLY (K8FF/Norcal Paddles! TLC555 HB keyer)
HW-8,0HR-100, Pixie2, Johnson Viking II, Drake TR-3, NC38S.
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
<http://www.qsl.net/we6w> (From Non-Ham to Extra in one Day.)

Date: Wed, 17 Dec 1997 12:17:47 -0500 (EST)
From: Robert Parks <rob3ert@vegas.infi.net>
To: newberry@cyberhighway.net
Cc: qrp-l@Lehigh.EDU
Subject: [32981] Re: [2N2222] Happy Bday Mr. Transistor
Message-ID: <199712171717.MAA05183@fh102.infi.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Ah, Greg, what memories,-- of the CK721 and CK722! They were the first transistors I ever owned and played with. HOWEVER, your CK722's are probably just resistors, now. The CK721 and CK722 were germanium PNP transistors in plastic cases. The cases were not sealed and the transistor element was not passivated, nor protected against moisture. Voila! After a "short" time, surface contamination created "shorts" across the elements, ruining the transistor. Raytheon then started putting their transistors into sealed "top-hat" type cases, as did all the other semi manufacturerers. When silicon finally became practical as a transistor element, passivation of the exterior surfaces was used, which made the transistor relatively immune to moisture. This made the use of plastic as a "case" practical for transistors.

Thank you for triggering a flood of wonderful memories!

72/73

Bob Parks
K6AEC (Las Vegas)

At 10:12 PM 12/16/97 -0700, you wrote:

>Do any of you still have any CK722 transistors around? I think I've got
>two (somewhere) still in the original box..... Seems like a long time
>ago for that one.

>

>Greg

>

>--

>-----

>| Greg Newberry newberry@cyberhighway.net |

>| WB7DUO QRP-L #760 |

>| NorCal #1899 CQC #465 AR-QRP #65 |

>-----

>

>

>

>

>

Date: Wed, 17 Dec 97 07:46:02 HST
From: mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)
To: qrp-l@Lehigh.EDU
Subject: [32982] kite parts catalog

Message-ID: <9712171746.AA05770@krypton.nmr.Hawaii.Edu>

Since so many people asked I will post this:

These guys do not sell kites. They sell components, a large selection of poles, tapered and not, spars of all compositions, rods, fittings to join them in various ways, including at angles, flying lines of all kinds, and fabric. Many parts look like spreaders for 10 and 6 meter quads, forms for helicals (do not use graphite or carbon fiber) and spreaders for tophats for portable antennas. Many of the poles top out at 54 inch lengths, however:

Goodwinds Ultimate Guide to Kitemaking Parts and Supplies
(has a price of \$4.95 but worth every cent)

Kitemaking Parts Retail Price List

The Gasworks Park Kite Shop
3333 Wallingford North
Seattle, WA 98003
1-206-633-4780

PS: Thanks for all the feedback on (non-)use of carbon fiber, graphite type rods for RF!

Mike Burger University of Hawaii at Manoa Department of Chemistry
AH7R - QRP-L #1053 - FISTS #3225 - BL11ch - Honolulu County

Date: Wed, 17 Dec 1997 12:49:20 -0500 (EST)
From: Bob Patten <n4bp@bc.seflin.org>
To: MJMULLINS@dow.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [32983] Re: Iambic A or B
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 17 Dec 1997 MJMULLINS@dow.com wrote:

>

> I've never used a paddle before. I started out with iambic B (sends the
> opposite dit or dah if you release the key before the end of the current
> dit or dah). I've only practiced for a few minutes so far, but I'm

>

I'd sure like to know more about the two protocols. Is there a source on-line that goes into detail on them? I haven't yet modified my K8FF paddles for non-iambic as I'm not too far off from being able to send on

it as is (but without using "squeeze keying").

73,

Bob Patten, N4BP

(0 0)

Plantation, FL

-----o00o-()-o00-----

E-Mail: n4bp@bc.seflin.org

Web Page: <http://wg104a.wh.uni-stuttgart.de/~n4bp>

Brass Pounder BBS: (954) 472-7715

Date: Wed, 17 Dec 1997 12:12:47 -0600
From: "Gary R. Hanson" <ghanson@uts.cc.utexas.edu>
To: rob3ert@vegas.infi.net
Cc: qrp-1@Lehigh.EDU
Subject: [32984] CK722 Memories
Message-ID: <34981440.6F10@uts.cc.utexas.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bob,

Saw your posting about the old CK722 and it brought back some fond memories. I built my first two transistor AM broadcast band radio out of two CK722's. I was all of 14-15 years old at the time...around 1958 or 1959, I think. I even went "mobile" with it by stringing wire between the two clothes hanger hooks in the back seat of the car, throwing the rest of the wire out the window, hooked up a battery and earphones and I listened to Rock and Roll all the way down the highway. Fat's Domino playing Blueberry Hill always brings fond memories of my early radio days. Something magic about hearing stuff on a radio you've built yourself.

Cheers,

Gary, KJ5VW

Date: Wed, 17 Dec 1997 17:59:55 +0000
From: Ed Loranger <we6w@qsl.net>

To: n4bp@bc.seflin.org
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [32985] Re: Iambic A or B
Message-ID: <3498131B.5B07@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Shoot! I sent this personal to Mike figuring no one else would be interested. Maybe the links below will be of help to you Bob. The rest is My Personal point of view. Please don't flame me on that.
-Ed

Hi Mike. I too only this year learned to use a paddle. I have the Iambic paddles connected to a basic electronic keyer I built. The keyer is not Iambic nor does it have any memory.

I decided to go with standard, non-iambic keying. Use my off hand to key (left) and write with my right hand.

This solves many problems. 1) I can use a bug a lot easier after using the key. 2) The savings by going to Iambic only result in about 7 did savings over regular keying, (And you don't have to learn and retrain yourself to squeeze key.)

Once you go Iambic, then you get stuck with A/B modes and difficult to switch to/from a bug. Forget about borrowing stuff from others...

I didn't switch the dah/dit paddle connections. I figured 95 percent of the keys are set up with dit on the thumb for right handers. I use my left hand and can easily borrow someone else's key and switch to left hand without any problem.

I easily send 30 WPM left handed and 20 WPM on the bug right now. Of course I only got my first bug about 2 weeks ago and have practiced a grand total of 2 hours. But hey, I can do it left handed!

If you read the following article:

<http://personal.riverusers.com/~foxes/W9KNI.html>
Or this:
<http://www.infinet.com/~len/cqrp7.html>

The Fall QRPp issue has more information about the major savings a keyer can give you over straight keys. But the Iambic mode -VS- Non-Iambic on a keyer results in very little improvement in sending speed.

And the cost is phenomenal. You have to retrain yourself to squeeze key.

That's my two cents buddy.

Maybe someday I will try Iambic mode, but only if I have trouble getting above 50 WPM on cw.

Will see you!

Very Best Holiday Wishes,
-Ed

--

72/73 de we6w qrp es CW ONLY (K8FF/Norcal Paddles! TLC555 HB keyer)
HW-8,0HR-100, Pixie2, Johnson Viking II, Drake TR-3, NC38S.
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
<http://www.qsl.net/we6w> (From Non-Ham to Extra in one Day.)

Date: Wed, 17 Dec 1997 13:15:20 -0500
From: "david's" <elim@ime.net>
To: <Kevin.B.Walker@ait6.ameritech.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [32986] Re: Introduction
Message-ID: <002001bd0b17\$bd7114e0\$2ec65ad1@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Kevin,

Great to have you on the list hope to hear you on 30m, One of my favorite bands have nearly worked dxcc there with 3 to 4 watts out.

A little advice on the antenna though a G5RV is a great antenna except on 30m not that you can't make contacts but your success would be far better with a 30m vertical , loop or dipole. Or if you have room you could use a modified g5rv like I'm using here

It's 70' either side of center (140' overall) fed with 44 feet of 450 line, then at least of 65 ft coax. I used 75 ohm rg-6 direct burial type, handles 100 watts OK.. this antenna will work all the WARC bands without a tuner and works Ok on 80 & 20 but not great on 40m. All antennas are a compromise when trying to make them multiband.

I've been thinking of getting an OHR 100a for 30m meters also.. Let me know your impressions

Again welcome to a great group will be looking for you qrp 2x 30meter
73&72 , DaveKc1di

-----Original Message-----

From: Kevin.B.Walker@ait6.ameritech.com <Kevin.B.Walker@ait6.ameritech.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Wednesday, December 17, 1997 10:42 AM
Subject: Introduction

Date: Wed, 17 Dec 1997 11:26:34 -0700
From: "Steve Hurst" <shurst@magiclink.com>
To: <nq2rp@juno.com>, <qrp-l@Lehigh.EDU>
Subject: [32987] Re: Cherokee SSB CB HT
Message-ID: <199712171824.NAA84980@nss4.cc.Lehigh.EDU>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Keith,

The "gaps" which you are talking about are the spaces between "channels" on the CB band. They are programed into the PLL in the rig. There is no way to change them. The only way you can pick up those freqs. is to unlock the "clarifier" control on the rig. So that it tracks on TX as well as RX. Even doing that , you still will not be able to recover all of the band . Some CB channels are spaced wider than 10 KHz. For example , Channel 22 is 27.225 , channel 23 is 27.255 ! These "spaces" will stay the same after the conversion to ten. You are able to to rx 28.455 and not 28.400 because the orginal freqs all end in "5" . Hope this helps , I converted a mobil cb rig about 5 or 6 yrs ago. So I did alot of studying on the subject before hand. CB's make great ten meter qrp rigs !! I've worked many dx stations with mine during the last peak. Of course a tri band beam at 40 feet did'nt hurt me either !! :-) Good luck...

73,
Steve Hurst
KA7NOC (southern Idaho)
<http://www.magiclink.com/web/shurst>
shurst@magiclink.com

>
>
>
> I just helpd a local here with the Cherokee 10 M SSB HT conversion. A
> nice radio, but there are some unexplained gaps in the 10 Meter coverage.
> Locally, we use 28.400 and 28.455 MHz for calling frequencies. The
> Cherokee would hit the 455 spot but not 400.

Date: Wed, 17 Dec 1997 13:24:28 -0600
From: ENGINEERING <clinco@bellsouth.net>
To: qrp-l@Lehigh.EDU
Subject: [32988] 38Special
Message-ID: <349826EC.3DD6@bellsouth.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have a complete 38 Special kit for sale. The components and board are still in the original packaging.

Sale price: \$30. money order. Shipping is included in the \$30.
Contact James (KD4QHB) at clinco@bellsouth.net

Date: Wed, 17 Dec 1997 13:30:47 -0500 (EST)
From: Bob Patten <n4bp@bc.seflin.org>
To: Ed Loranger <we6w@qsl.net>
Cc: QRP-L Reflector <qrp-l@Lehigh.EDU>
Subject: [32989] Re: Iambic A or B
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; CHARSET=US-ASCII

On Wed, 17 Dec 1997, Ed Loranger wrote:

>
> Hi Mike. I too only this year learned to use a paddle. I have
> the Iambic paddles connected to a basic electronic keyere I
> built. The keyer is not Iambic nor does it have any memory.
I've always used a non-iambic paddle, the same Bencher for many years.
I've used it with many different keyers over those years. Currently I
only have three: The ones built into NA, the IC-706, and the FT-1000MP.
All three are iambic, but of course cause me no distress with the

non-iambic Bencher. Along comes the K8FF, problem. It's hard for me to reliably release one side before hitting the other, hence an extra character. Will iambic mode-a solve this? I'll have to try it with NA which gives the option.

I may pursue modifying the K8FF to non-iambic. It should not be too difficult in my current configuration. I moved the left plastic paddle to the other side of its brass arm to reduce the spacing between the paddles. By extending the right plastic paddle mounting screw so that it just protrudes through the brass arm a bit, I should be able to restrict the travel so that it is not possible to close both contacts simultaneously. I haven't heard of anyone trying this yet and I haven't yet had the time to play with it. Maybe you'll be the first? :-)

>

> If you read the following article:

>

> <http://personal.riverusers.com/~foxes/W9KNI.html>

> Or this:

> <http://www.infinet.com/~len/cqrp7.html>

I will check these out and thanks!

>

> Very Best Holiday Wishes,

Right back atcha, Ed!

73,

Bob Patten, N4BP

(0 0)

Plantation, FL

-----o00o-()-o00-----

E-Mail: n4bp@bc.seflin.org

Web Page: <http://wg104a.wh.uni-stuttgart.de/~n4bp>

Brass Pounder BBS: (954) 472-7715

Date: Wed, 17 Dec 1997 13:46:26 -0500 (EST)

From: Robert Parks <rob3ert@vegas.infi.net>

To: ghanson@uts.cc.utexas.edu

Cc: qrp-1@Lehigh.EDU

Subject: [32990] Re: CK722 Memories

Message-ID: <199712171846.NAA23233@fh102.infi.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Gary,

Interesting! I was already out of college when the CK721 and CK722 became available. Of course, had no solid-state courses during my normal college years; they weren't available until after I got out of college! They came later, along with much experimentation. I even tried to duplicate the Bell Labs transistor, using a couple of (ceramic-cased) 1N34's cut up and to get two "points" for a germanium point contact transistor. Actually got a Beta of 2! The Raytheon transistors allowed me to test "duality", which was all the rage then for those of us who cut our eye-teeth on vacuum tubes. Built a number of amplifiers, oscillators and radios with my CK's, before they became resistors!

I agree with you about the "magic" of hearing or working someone with a rig one has built. Transistors have really made this even more practical as well as possible. I'm almost ready to put my 2N2222 rig on the air. Have all the pieces operating at this point.

Keep in touch.

72/73

Bob Parks
K6AEC (Las Vegas)

At 12:12 PM 12/17/97 -0600, you wrote:

>Bob,

>

>Saw your posting about the old CK722 and it brought back some fond
>memories. I built my first two transistor AM broadcast band radio out
>of two CK722's. I was all of 14-15 years old at the time...around 1958
>or 1959, I think. I even went "mobile" with it by stringing wire
>between the two clothes hanger hooks in the back seat of the car,
>throwing the rest of the wire out the window, hooked up a battery and
>earphones and I listened to Rock and Roll all the way down the highway.
>Fat's Domino playing Blueberry Hill always brings fond memories of my
>early radio days. Something magic about hearing stuff on a radio you've
>built yourself.

>

>Cheers,

>

>Gary, KJ5VW

>

>

Date: Wed, 17 Dec 97 08:47:40 HST
From: mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)
To: qrp-1@Lehigh.EDU
Subject: [32991] QRP output levels
Message-ID: <9712171847.AA05951@krypton.nmr.Hawaii.Edu>

In an Email from Guam describing the extensive typhoon damage, virtually all power grid wiped out etc., one ham said he was only running QRP levels and probably would have trouble with contacts, just 100 watts.

I know the feeling, everything is DX from here also...

Date: Wed, 17 Dec 1997 11:53:15 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-1@Lehigh.EDU, cqclist@lists.csn.net,
CQC.Officers.and.Committee.Chairs@edison.chisp.net
Subject: [32992] Web Site Update
Message-ID: <199712171856.LAA03398@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

The web site move has gone fairly smoothly, and should be essentially complete now.

Most of the changes have been organizational, but I've been able to add some features, too, like the guest book on the CQC page.

Main noticeable thing is that addresses are shortened--
<http://www.mtechnologies.com/mthome> is now just
<http://www.mtechnologies.com> and all the supported sites have
new URLs without the "/mthome bit." They are

<http://www.mtechnologies.com/cqc> for the Colorado QRP Club
<http://www.mtechnologies.com/harmonic> for Harmonic Tonics
<http://www.mtechnologies.com/amy> for my daughter's page
<http://www.mtechnologies.com/n1fn> for my personal home page and
"virtual garage sale."

If you use an old (i.e. bookmarked) address, you SHOULD get a

jumper page to take you to the new one.

It's quite possible that I haven't got every link adjusted or every image in the right directory, so please advise broken links and images!

Date: Wed, 17 Dec 97 17:59:29
From: "KA5T Larry Wise" <lewise@inetport.com>
To: "qrp" <qrp-1@Lehigh.EDU>
Subject: [32993] Re: [2N2222] Happy Bday Mr. Transistor
Message-ID: <199712171905.NAA00312@admin.inetport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

While trying to reorganize my junkbox recently I came across some very old devices with the lead rusting, some rusted off....

Did some of these early devices use steel leads?????

72,
Larry

Larry KA5T lewise@inetport.com Georgetown, Texas

Date: Wed, 17 Dec 1997 12:21:17 -0700 (MST)
From: Chris Trask <ctrask@primenet.com>
To: Steve Slavsky <sslavsky@CapAccess.org>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [32994] Re: QSL Card Software
Message-ID: <Pine.BSI.3.96.971217121936.22288A-100000@usr01.primenet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 17 Dec 1997, Steve Slavsky wrote:

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I was mobile, too, with 2N107's (they were GE transistors that came out at about the same time or right after the CK722's). I guess about 1957 is right. I built a BC radio in a little box and mounted it on the handlebars of my Schwinn. I made a BIG whip out of tubing and an automobile antenna attached to the back of the bike, and rode around listening to rock 'n roll wearing headphones with big rubber cushions. Boy, were the girls impressed...NOT!

Vic K2VCO

Date: Wed, 17 Dec 1997 14:30:33 -0500 (EST)
From: Jim Eshleman <lujce@hooch.cc.Lehigh.EDU>
To: qrp-1@Lehigh.EDU
Subject: [32996] Re: [2N2222] Happy Bday Mr. Transistor
Message-ID: <97Dec17.143034-0500_est.10422-16040+37@hooch.cc.Lehigh.EDU>
Content-Type: text

Gang,

Check-out the story on what may be the next generation of transistors at:

http://www.yahoo.com/headlines/971209/wired/stories/transistor_1.html

Gads! "Quantum mechanical tunneling of electrons."

73
Jim N3VXI

Date: Wed, 17 Dec 1997 14:10:28 EST
From: AF5U <AF5U@aol.com>
To: nq2rp@juno.com, qrp-1@Lehigh.EDU
Subject: [32997] Re: 6 Meter or 10-meter HTs
Message-ID: <fee6380e.349823a6@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

There is a lady in LA who will sell any Cherokee radio 6-meter FM or 10-meter SSB HT for \$210 MC/VISA and buyer pays UPS. Here name is Ginger White @

800-949-7099. 73 David Little, AF5U

Date: Wed, 17 Dec 1997 12:03:55 -0700
From: "Michael Fletcher" <kl7ixi@mailcity.com>
To: qrp-1@Lehigh.EDU
Subject: [32998] TiCK-2B Review
Message-ID: <NFDHDNFJIFNCAAAA@mailcity.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Happy Holidays Gang,

I obtained one of the first TiCK-2B surface mount chips available from Embedded Research and am having fun with the new features. The chip is so new that the package doesn't come with instructions for the 2B features.

The TiCK keyers were my first experience with surface mount devices and turned out to be a easy learning curve, once I learned to stop playing "tiddle winks" with

the 'lil parts by putting too much pressure with a pencil point on the parts as I held them in place while soldering. A magnifying glass was a necessity for my tired

eyes so I obtained a lighted model on a stand (\$12-\$15). It only took about an hour

to wire it up and put it on the air. All the parts are included, even thin diameter

solder, except for wires to the momentary switch, battery, and jacks.

My previous TiCKs were TiCK-1 models without memory so I will list the 2B features

as Brad WB8YGG of Embedded Research gave them to me:

The TiCK-2B is quite similar to the TiCK-2 in programming, plus it has beacon mode and a streamlined method for sending message memory.

The message memory is sent by just tapping the button. Holding it down longer yields the "S" for speed command, etc.

In Admin mode, the last command is "B" for beacon. Let go of the button when it's

sending "B" and then tap a paddle and you are in beacon mode. Do that process again

and you are back to normal mode. To start the beacon, just tap the button and the message memory will start and repeat.

If you want a delay after the message, when you program the message, wait after you are done programming, as long as you want, or as long as the message memory is available, and then hit the button.

The beacon will repeat over and over.

What this means to me is the ability to program a 2X2 call without the "K" at the end. I can just tap the momentary switch to send the 2X2 as often as I want and be able to interrupt it at any time. Then I manually send a "K" or other characters from the paddle.

This programming will stay as long as the chip is powered with 3-5vdc. Since it only draws about 1ma in standby mode, I decided to leave a switch out of the circuit.

When I get the conventional 2B chip for my .38 Special it will have to be programmed each time the transceiver is powered on.

The little board looks extremely small in the Altoid case but I don't have anything smaller for it. Also the keyer is going to be jammed along with other camping gear into my BMW motorcycle cases and extremely small items tend to get lost among the other junk.

My only complaint is that my damaged ears can hardly hear the high-pitched pizeo used for sidetone (specs say a 625hz tone but mine sounds much higher) and programming commands. I need to find one with a lower pitch or some other arrangement.

The Embedded Research website is: <http://www.frontiernet.net/~embres>

All opinions are my own

72,

Mike KL7IXI

SW Washington Woods

AZ ScQRPions AK/QRP Norcal QRP-L

Sierra, .38 Special, 40m extended double zepp

Free web-based e-mail, Forever, From anywhere!

<http://www.mailcity.com>

Date: Wed, 17 Dec 1997 15:09:16 -0500

From: Bill Howell <bhowell@mail.utexas.edu>

To: qrp-l@Lehigh.EDU

Subject: [32999] Re: Allen Wrench - NorCal Paddles - Rage

Message-ID: <199712172009.PAA64124@nss4.cc.Lehigh.EDU>

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Nils Wrote:

"..... and I smashed the hell out of mine [plastic box] in a fit of
rage . . ."

Ahh, yes. I know where you're coming from, Nils.
I once had a Phone Mate (tm) answering machine which
had various problems (intermittent, of course).

Bought a new AT&T Digital to replace it (works fine,
lasts a long time).
Put the Phone Mate out on the deck and smashed it _FLAT_
with a 10 pound sledge hammer. Really.
VERY satisfying.

Obqrp- Got my Norcal Paddles yesterday. Fixin' to break out
the 600-grit, and go to it.

Bill Howell
University of Texas at Austin
Performing Arts Center
Electronic Maintenance
N5ALO QRP-L #415

Date: Wed, 17 Dec 1997 15:08:42 EST
From: AF5U <AF5U@aol.com>
To: qrp-l@Lehigh.EDU
Subject: [33000] Cherokee 10 & 6 meter HTs
Message-ID: <54f5ee9f.3498314d@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

For those of you who might be thinking about a 10-meter SSB handie talkie,

Cherokee makes one called the AH-100. Specs can be found at web site: www.wirelessmarketing.com. It's a CB model that can be modified by a licensed ham for operation on 10 meters. However, it should not be re-modified for use at CB freqs. or used by CBers on ham freqs! Information to do this can be found at web site: www.coaxkid.com Cherokee also has a 6-meter FM HT ready for use on 6-meters without modification (see it on the [wirelessmarketing.com](http://www.wirelessmarketing.com) site).

When it comes to purchasing either Cherokee HT call: Ginger White @ 800-949-7099 for the best price. She takes MC/VISA and ships same day UPS.
73/72 David Little, AF5U/ QRP

Date: Wed, 17 Dec 1997 12:16:37 -0500
From: Stephen Gibson <SWGibson@worldnet.att.net>
To: qrp-1@Lehigh.EDU
Subject: [33001] Anti-static wrist straps
Message-ID: <19971217202745.AAA19161@DEFAULT>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Some time ago there was an offer for anti-static wrist straps. At the time I didn't need any and so didn't jot down details of the offer. Can somebody give me the address and cost, etc? Also, how can I set-up an anti-static work station in my study on the second floor with a carpet on the floor? I'd appreciate any tips and hints from any of the knowledgeable members of the group.

Thanks in advance.

72

Steve, WB4NBI

Date: Wed, 17 Dec 1997 15:30:49 -0400
From: Greg Weinfurtner <weinfurtner@ouvaxa.cats.ohiou.edu>
To: qrp-1@Lehigh.EDU
Subject: [33002] Re: Allen Wrench - NorCal Paddles - Rage
Message-ID: <v03110701b0bdd5673c56@[132.235.72.188]>
MIME-version: 1.0
Content-type: text/plain; charset="us-ascii"
Content-transfer-encoding: 7BIT

> Put the Phone Mate out on the deck and smashed it _FLAT_
> with a 10 pound sledge hammer. Really.
> VERY satisfying.
>

Gang,

Had to laugh at that! I think I must be getting giddy here at the end of the day... I used to work for an audio/visual shop and we used to have fits over Bell and Howell Ringmaster slide viewers. They looked sorta like a square box with a 35mm slide projector on top that projected onto its own screen. They were a BEAR to work on. We hated the dern things!

Well, me a few of my pals took one out (It was heading to the junk anyway) to a local farm and promptly and summarily executed the Ringmaster at about 40 yards. Everyone had their favorite sidearm/long gun .38, .357, 44 mag, 30/30, etc. Parts flew EVERYWHERE! We gathered them up in a bag and took it back to the shop.

Then we got to laughing as we tried to turn it in to one of our salesman for WARRANTY repair! He knew what was going on and went right along with the gag. Carried the gag next door to the local "beverage" establishment and had quite a few laughs.

That was more than 15 years ago, and I've matured since...(Don't ask my XYL to confirm that...)

CU all! 73 de NS80

Date: Wed, 17 Dec 1997 12:53:56 -0800
From: "Dasher, Mark" <DasherM@IRWIN.ARMY.MIL>
To: "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [33003] Test - Do Not Read
Message-ID: <c=US%a=_%p=ARMY%l=IRWEXCH2-971217205356Z-7354@irwin-exch2.army.mil>

Testing new e-mail server

Mark Dasher, Chief TACS
(DSN 470) 760-380-6621 dasherm@irwin.army.mil

Date: Wed, 17 Dec 1997 14:03:33 -0700
From: Gary Hembree <Gary.Hembree@ASU.edu>
To: tentec@contesting.com
Cc: qrp-1@Lehigh.EDU
Subject: [33004] WTB: TenTec 9MHz Filters
Message-ID: <34983E25.4E0B@ASU.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I still need the TenTec model 217 (500Hz) and 219 (250Hz) 9MHz filters. I would also like to obtain a couple more of the 4 pole 2.7KHz 9MHz filters that came with the stock Argosy and in the 1st IF of the Corsair. Please email type, quantity available and asking price.

73

Gary Hembree, N7IR
gary.hembree@asu.edu

Date: Wed, 17 Dec 1997 13:13:44 -0800
From: "Frank A. West" <ke6vhm@earthlink.net>
To: "QRP Group" <qrp-1@Lehigh.EDU>
Subject: [33005] Microsim PSpice
Message-ID: <199712172112.NAA03616@sweden.it.earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

OK Guys,

Hello and Happy Holidays to all. I just received my demo CD from Microsim. With all it says it will do, I will be in the learning mode till next year. So those of that use PSpice and have schematics already made..... I would like to ask if you could E-mail me some to use and play with while I am learning.

I can whip one out on a napkin at the restraurant in a minute, but this is a whole other thing.

I remember seeing a post a week or so ago that just had a list of numbers and letters. How do you put that in? I think I might still have that post will check.

I guess that is it for now, I know there will be more to ask. Thanks in advance for any and all help.

TTFN 73 Frank KE6VHM
Grid Square DM13
Woodcrest, CA
QRP-L #1323 / AK/QRP #269

* ICQ UIN# 1778080 ASK ME!!!*
*IF YOU KNOW WHAT IT MEANS GO AHEAD *

CW Forever - Have Paddle will Pound
ke6vhm@earthlink.net

Date: Wed, 17 Dec 1997 17:17:33 -0500 (EST)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-l@Lehigh.EDU>
Subject: [33006] Re: Allen Wrench - NorCal Paddles - Rage
Message-ID: <Pine.LNX.3.93.971217162748.964B-100000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 17 Dec 1997, Bill Howell wrote:

> Put the Phone Mate out on the deck and smashed it _FLAT_
> with a 10 pound sledge hammer. Really. VERY satisfying.

This brought back happy memories :) I once had a walkman that would vary it's speed for no reason, took it out on the deck, checked the lay of the green, selected the appropriate club, FOUR!! It made a very satisfying keewaaachhkk!!! as it hit the shed and disintegrated.

I pickup up most of the pieces and put them in a ziplock bag to show co-workers who had put up with me complaining about it for months. It turned into the "magic talisment" of the office. When ever something malfunctioned (printer, computer, typewriter) someone would wave the "talisment" over the offender and ask, "Do you want to go golfing... ?" And as often as not "it" would start working. :) Enough to make people believe in the power this thing had. As far as I know it's still there, still keeping AT&T humming.

What's this have to do with QRP? Not much, but if you have a rig/project/kit that you've "vented" on, you might want to keep it around to "show" the others to keep them in line :) 72

"So punk, you gotta ask yourself, did he pick up a wood or only a putter, huh, did he ?!?"

```
-- Chris Cartwright,   Technical Engineer   |       ccart@vidtel.com       --  
-- N3XRV      ARRL-VE   QRP WAS 27/10(w/c)   | http://dns.vidtel.com/~ccart --  
-- QRP-L #655   NORCAL #1891   QRP-ARCI #???? NJ-QRP #105   LIQRP #???? --
```

Date: Wed, 17 Dec 1997 16:17:44
From: Roger Braker <msebrakr@telepath.com>
To: qrp-l@Lehigh.EDU
Subject: [33007] Re: Allen Wrench - NorCal Paddles - Rage
Message-ID: <3.0.1.16.19971217161744.529f1c90@telepath.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Guys,
Does all this stuff about annihilation broken electronics equipment really have any thing do with QRP?:-) J/K. I don't mind and get a good laugh.

73,
Arnold KD5CKH

At 03:30 PM 12/17/97 -0400, you wrote:

```
>  
>>      Put the Phone Mate out on the deck and smashed it _FLAT_  
>>      with a 10 pound sledge hammer. Really.  
>>      VERY satisfying.  
>>  
>  
>  
>Gang,  
>  Had to laugh at that! I think I must be getting giddy here at the  
>end of the day... I used to work for an audio/visual shop and we used to  
>have fits over Bell and Howell Ringmaster slide viewers. They looked sorta  
>like a square box with a 35mm slide projector on top that projected onto  
>its own screen. They were a BEAR to work on. We hated the dern things!  
>  
>  Well, me a few of my pals took one out (It was heading to the junk  
>anyway) to a local farm and promptly and summarily executed the Ringmaster  
>at about 40 yards. Everyone had their favorite sidearm/long gun .38,  
>.357, 44 mag, 30/30, etc. Parts flew EVERYWHERE! We gathered them up in a  
>bag and took it back to the shop.
```


>
> Then we got to laughing as we tried to turn it in to one of our
> salesman for WARRANTY repair! He knew what was going on and went right
> along with the gag. Carried the gag next door to the local "beverage"
> establishment and had quite a few laughs.
>
> That was more than 15 years ago, and I've matured since...(Don't
> ask my XYL to confirm that...)
>
> CU all! 73 de NS80
>
>
>
>
>
>

Date: Wed, 17 Dec 1997 16:43:23 -0500
From: "John P. Spoonhower" <spoon@kodak.com>
To: qrp-1@Lehigh.EDU
Subject: [33008] Re: WTB: TenTec 9MHz Filters
Message-ID: <3498477B.11E0@kodak.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gary Hembree wrote:

>
> I still need the TenTec model 217 (500Hz) and 219 (250Hz) 9MHz
> filters. I would also like to obtain a couple more of the 4 pole
> 2.7KHz 9MHz filters that came with the stock Argosy and in the 1st IF
> of the Corsair. Please email type, quantity available and asking
> price.
>
> 73
>
> Gary Hembree, N7IR
> gary.hembree@asu.edu

My recollection is that the xtal filters in the Argosy are
not really 9.000 Mhz. I am not sure about the Corsair, but I would
certainly check for compatibility....
72, john, kc2du

Date: Wed, 17 Dec 1997 17:10:32 -0500
From: "Jim Kortge, K8IQY" <jokortge@mci2000.com>
To: qrp-1@Lehigh.EDU
Subject: [33009] Re: Software
Message-ID: <3.0.1.16.19971217171032.386ffaf6@mail49.mci2000.com>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii

At 10:33 AM 12/17/97 -0500, Todd Nichols KB0HQU wrote:

>Of course, all this diatribe begs the question: have I ever tried
>Circad? Yes, twice. I found it VERY difficult to use. Why? I'm
>no stranger to CAD software, or pcb layout. There was no tutorial
>or documentation! I did find the Circad FAQ, but it was very
>limited and assumed that you knew how to use the software. And
>having to call someone for basic information is not acceptable.
>I still don't like the interface, but I can't give it a fair
>chance due to lack of docs. I don't have time to twiddle with
>it and to learn it by trial and error (this is what the docu-
>mentation buys you). I know the demo version of Circad is free;
>so is the demo version of Ivex's software. And - much as it
>pains me to say it :-) there are times when having a program
>behave "correctly" under Windows is an advantage. Steve is
>probably just as fast with Circad as I am with Ivex, but he
>likes one and I like the other. We always hate using something
>we don't know how to use.

Without belaboring the point, I share Steve's views also.
I don't find CirCad as intuitive to use, and don't
use it because it is a crippled package. I do
use IVEX and have purchased extra pins.

IVEX also has ongoing e-mails to their users with helpful
tips on using the product, as well as announcing bug
fixes etc. that are important to their user community.

Just another view, but I felt Steve's assessment a bit overcritical
of the IVEX system. It's not perfect, but it isn't a piece of
crap either.

Flame suit on..... :-)

Thanks for the floor gang, and 72.....Jim

PS, I don't work for IVEX either, I just use their product,
and like it!

Jim Kortge, K8IQY (ex NU8N) | NorCal, QRP-L
jokortge@mci2000.com | __o H.F. bicycle mobile
Fenton, MI | _`<, Mizuho 17/40 SSB
... .. (*)/(*)
NorCal 38S/30 Log - 34 States; 40 Countries - Running 3 watts
Most recent - Iowa Mauritius

NorCal 38S/17 Log - 19 States; 33 Countries - Running 1.5 watts
Most recent - Maine England

Date: Wed, 17 Dec 1997 17:30:16 -0500 (EST)
From: Kevin Bunin <p014455b@pb.seflin.org>
To: qrp-l@Lehigh.EDU
Subject: [33010] GAP (fwd)
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Kevin Bunin
p014455b@pbfreenet.seflin.lib.fl.us

----- Forwarded message -----
Date: Sun, 16 Nov 1997 18:39:24 -0500
From: JOHN S MATERKA <AKRETAM@WORLDNET.ATT.NET>
To: p014455b@pb.seflin.org
Subject: GAP

HI KEVIN....

I NEGLECTED TO MENTION THAT THE COAX IN THE UPPER PART OF THE
GAP TITAN WAS OF DUBIOUS QUALITY AND ALSO IT WAS HANKED VERY TIGHTLY IN
ORDER TO FIT INSIDE THE ALUM. TUBING..THE LOOPED BENDS ARE VERY WELL
BEYOND A SMOOTH BEND AND THEREFORE STRESSING THE PRIMARY INSULATION
BEYOND ITS PHYSICAL LIMIT...THAT IS WHY A REPLACEMENT COAX GAP SENT TO
ME BURNED AT ONE OF THE BENDS...JUST THINK WHAT THESE BENDS DO TO THE
IMPEDANCE CHARACTERISTIC OF THE COAX....
I REMOVED THE REPLACEMENT COAX AND PUT BACK THE ORIGINAL WHICH HAD NO
SIGNS OF BURNS OR PHYSICAL DAMAGE AND I MANAGED TO GET THE ANTENNA BACK

INTO WORKING ORDER...THIS TIME, WITH THE OTHER CORRECTIONS I MADE, THE ANTENNA PERFORMED QUITE WELL, EVEN IN THE 80M SEGMENT....
THE ANTENNA IS AT MY ANN ARBOR LOCATION, UP ABOUT 15FT OFF THE GRND WITH NO GUYS....IF IT WILL NOT BE SUBJECT TO ANY ICE STORMS, I EXPECT IT WILL BE UP AND RUNNING WHEN I GO THERE IN MAY98...

SAVE YOUR MONEY AND BUY A DX-77.....MY GAP TITAN IS NOW 3YRS OLD AND OF WHICH I GOT ABOUT 1-YEAR OF DECENT USE....GOOD THING ,I ALSO HAVE A LONG WIRE WINDOM IN ANN ARBOR....73.....JJ W8HLS

P.S. ...MAY ALL THE GAP-TITAN'S REST IN PIECES.....HI HI....JJ

Date: Wed, 17 Dec 1997 23:05:43 -0000
From: "Miguel" <eaqrp-c@arrakis.es>
To: <qrp-1@Lehigh.EDU>
Subject: [33011] 208 Tentec audio filter
Message-ID: <199712172235.XAA30619@mx1.landsraad.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit

Hello gang:

I still need the TenTec model 208-A Notch/CW Filter for my Argonaut 515.
Please email type, telling me price.
Thanks advanced
72

Miguel Montilla, EA3EGV <mailto:eaqrp-c@arrakis.es>

EA QRP Club
P.O.Box 2096
08200 Sabadell
Barcelona-Espa a WEB SITE: <http://www.eaqrp-c.arrakis.es>

Date: Wed, 17 Dec 1997 17:49:41 EST
From: K5BDZ <K5BDZ@aol.com>
To: Gary.Hembree@ASU.edu, qrp-1@Lehigh.EDU

Subject: [33012] Re: WTB: TenTec 9MHz Filters
Message-ID: <a25406b3.34985707@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Gary

Argosy Filters are a smidge off 9.000 MHz, like maybe 9.0015 or something. I converted my Argosy to 9.000.00 MHz IF filters and had to change the BFO crystal to 9.000 and tune with a trimcap. Works Great. Has two cascaded 8 pole SSB filters and then I use audio filters for CW.
Oh well, so much for the Argosy.
Bill, K5BDZ

Date: Wed, 17 Dec 1997 23:05:08 -0000
From: George Dobbs <g3rjv@gqrp.demon.co.uk>
To: qrp-l@Lehigh.EDU
Subject: [33013] G QRP CLUB US REP
Message-ID: <01bd0b40\$37fd46c0\$LocalHost@kcubkvql>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Attention all US members of the G QRP Club.
As from now Mike Kilgore is replaced as the
G QRP Club US Representative by Bill Kelsey, N8ET.

Details will be in the Winter SPRAT.
Due to be mailed next week.
Bill will handle membership renewals in the US
and has a small stock of G QRP Club items for sale.

BILL KELSEY N8ET
3521 SPRING LAKE DR.
FINDLAY
OHIO 45840
U.S.A.
kanga@bright.net

Best Wishes to All
George Dobbs G3RJV
g3rjv@gqrp.demon.co.uk
The G QRP Club

"It is vain to do with more
what can be done with less"
William of Occum. 1290-1350

Date: Wed, 17 Dec 1997 18:08:31 EST
From: KB9RPD <KB9RPD@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [33014] Re: QSL Card Software
Message-ID: <40a47c82.34985b71@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Steve,

I bought the My Lable Maker program....I think it was \$30 at Office Max or something like that. I purchased it several years ago. But, after becoming a new ham in October of this year, I thought about QSL cards. QSL cards are just post cards....so, I went to my local Best Buy/Office Depot and bought a package of the Avery Post Cards for laser printers/deskjets. The My Lable Maker program had the Avery code for this layout. All I did was design the front, saved it -- then designed the back and saved it. I printed the fronts of 10 sheets of post cards (there are 4 to a sheet) then loaded the back side and flipped them over and printed the rest. They came out great!

Ted

In a message dated 97-12-17 09:44:19 EST, you write:

<< Subj: QSL Card Software
Date: 97-12-17 09:44:19 EST
From: sslavsky@CapAccess.org (Steve Slavsky)
Sender: owner-qrp-1@Lehigh.EDU
Reply-to: sslavsky@CapAccess.org
To: qrp-1@Lehigh.EDU (Low Power Amateur Radio Discussion)

Does anyone know of freeware/shareware etc. for making QSL cards on your PC? Or have some templates that can be used in MS Word or MS Draw? I would like to customize QSLs based on the event/location and have access to a decent color printer. I have not been able to find anything on the WWW about this yet. I'm not a graphic artist, so I do a lot better modifying something that's been developed.

Any help is appreciated (please do not mail any graphics to this address, it's text only - responses that include graphic enclosures should go to radioham@erols.com). Thanks.

72/73,

Steve, N4EUK

Reston, VA

Date: Wed, 17 Dec 1997 15:16:21 -0800 (PST)
From: camqrp@cyberg8t.com (Cam Hartford)
To: qrp-1@Lehigh.EDU
Subject: [33015] N/T+ Sprint Goofs
Message-ID: <199712172316.PAA29678@key.cyberg8t.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

OK Guys,

So I can't read a calendar.

They say the first thing to go is your short-term memory. I can't remember what the next thing to go is.

Regarding the date of the N/T+ sprint, let's do it in March of "1998" instead of "1997". Those of us who are time-travel challenged would be at a distinct disadvantage. (I thought that Chuck might be able to do this contest back in '97 because he does CW at the speed of light and could probably retrograde his signals back in time. But then I heard him try to send "CQ CQ Contest" at Pacificon and it came out "CG CG ...")

I also neglected to indicate that Novices should sign their call followed by "/N" and Tech+ licensees should sign their call "/T" so we know who they are. They are worth the Big Points to themselves and the rest of us.

Thanks to the many eagle-eyed readers out there who wrote to me to point out my errors. Where would I be without you guys?

72/73,

Cam N6GA
Your Humble ARCI Contest Person

Date: Thu, 18 Dec 1997 00:46:29 -0000
From: "Miguel" <eaqrp-c@arrakis.es>
To: <qrp-1@Lehigh.EDU>
Subject: [33016] Feliz Navidad y prospero 1998, Merry Christmas.....

Message-ID: <199712172343.AAA09800@mx1.landsraad.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 8bit

Hi gang:

Merry Christmas and happy new year for all.

72

Miguel Montilla, EA3EGV mailto:eaqrp-c@arrakis.es

EA QRP Club

P.O.Box 2096

08200 Sabadell

Barcelona-Espa a WEB SITE: <http://www.eaqrp-c.arrakis.es>

Date: Thu, 18 Dec 1997 00:51:49 -0000

From: "Miguel" <eaqrp-c@arrakis.es>

To: <qrp-1@Lehigh.EDU>

Subject: [33017] RV: Feliz Navidad y prospero 1998, Merry Christmas.....

Message-ID: <199712172350.AAA31887@mx1.landsraad.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

Hi gang:

Merry Christmas and happy new year for all.

72

Miguel Montilla, EA3EGV mailto:eaqrp-c@arrakis.es

EA QRP Club

P.O.Box 2096

08200 Sabadell

Barcelona-Espa a WEB SITE: <http://www.eaqrp-c.arrakis.es>

Date: Wed, 17 Dec 1997 23:55:28 GMT

From: adams@chuck.dallas.sgi.com (Chuck Adams)

To: qrp-1@Lehigh.EDU
Subject: [33018] CK722s, Transistors, and Chips
Message-ID: <199712172355.XAA07429@chuck.dallas.sgi.com>

Gang,

I sent email in response to Paul Harden's post this a.m. about the old transistors and I told him I was going to use CK722's. :-) I forgot to cc to the group, so here is a recap.

There is currently on sale where Scientific American is sold a Scientific American Special Issue called "solid-state Century - the past, present and future of the transistor". This is a must read item for those interested in the history of the technology that most of us use daily.

We as a group do not have to worry about the loss of the transistor as this group has stockpiled 90% of the world supply of 2N2222s. :-) And I wouldn't be able to guess at the number of 2N3904s, 2N3906s, 2SC799s, 2N3553s, and numerous other parts. Then there was the NE602 scare and the rush on those parts..... :-)

On page 44 and 45 of the above magazine there is an article on "Where Tubes Rule". I laughed when I read paragraph three where Michael J. Riezenman said, and I quote, "For the uninitiated, which you almost certainly are if you're younger than 40 years of age, vacuum tubes were the active electronic devices used by primitive peoples before transistors and integrated circuits were invented." Hmmm. I didn't realize that I was primitive at the time. Has civilization as we know it progressed that far? Inquiring minds wanna know. :-)

Those of us that saw the migration in the late fifties and early sixties from vacuum tubes to transistors remember the wailing and gnashing of teeth as we all were herded along into the 'new age' of electronics.

Now it seems that in some ways history is repeating itself with migration from transistors and ICs into SMT circuits and just how small can we go? You mean I can really build a NC40 in a thimble with CMOS III keyer and tuner?

On page 98 is an article on the new Quantum-Mechanical

Computers. I knew that all those hours in QM classes would pay off. I may have to ask W5TFB for some refresher mathematics information. :-) For those that are bored with milli-watting can now try the next level with nano-watting (QRPpppp). You had better hope that this sunspot cycle reaches a new record maximum. :-)

Several weeks ago I ran into Jack Kilby of Texas Instruments fame in the parking lot of Office Depot. He and I were in the EE Department of Texas A&M University at the same time. Small world indeedy.

I saw at the time it was completed the first manufactured LED at TI during a summer when I was a coop there. Those were the days. :-)

So all this discussion of old time technology does bring out the stories. OK back to the fox schedule in progress.....

Was it just me or did 40M last night seem very noisy and very very long? That was Tuesday night in the USofA.

FYI

Chuck Adams K5FO CP-60
<http://reality.sgi.com/adams> adams@sgi.com

End of QRP-L Digest 942

